THE CHEMIST AND DRUGGIST, DECEMBER 23, 1922.



TELEPHONE: CENTRAL 3617 TELEGRAMS: "CHEMICUS, CANNON, LONDON" (2 Words)

No. 2239.

PUBLISHED WEEKLY AT 42 CANNON ST., LONDON, E.C.4.

DECEMBER 23, 1922.

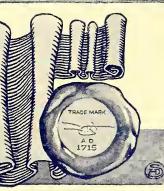
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Vol. XCVII.



<u>Greetings</u>

Know ye by these presents that we, the Directors of Allen& Hanburys And do wish you a Merry Amas and a Prosperous New Year....



Important Announcement.

THROUGHOUT THE MONTH OF DECEMBER

Pharmacists will be able to sell their existing supplies of

WRIGHT'S COAL TAR SOAP

at the present P.A.T.A. Prices.

In anticipation of reduced prices to the public on

JANUARY 1st, 1923,

the reduced wholesale prices will be in operation from December 1st, 1922, but with the distinct understanding that the purchaser will not sell to the public below the present prices for Toilet Tablets 7d. per tablet, and for Bath Tablets 1/- per tablet, until January 1st, 1923.

NEW WHOLESALE TERMS:

Wright's Coal Tar Soap	Ordinary Wholesale Prices.	Lowest Wholesale Prices for £8 Orders and upwards.
	4/11 doz. tabs 14/9 ,, boxes 24/6 ,, ,,	51/8 gross tabs 155/- ,, boxes 21/6 doz. boxes

Monthly account less 21% discount.

The Retail Price on January 1st, 1923, will be 6d. and 10d. per tablet.

WRIGHT, LAYMAN & UMNEY, LIMITED

46, SOUTHWARK STREET, LONDON, S.E.I.

Big reductions in Tablet prices!

Name					25s	100s	1000s
Aloin Compound					4/3	10/6	5/6
	ne, dr. 1				5/9	16/6	10/6
Antifebrin Comp., f	orm 1				4/9	12/3	5/6
× Aspirin, gr. 5					3/6		3/9
× Aspirin, gr. 5 Bismuth, Dyspepsia		50s 7/- p	er-doz.			,	9/~
× ———× Bismuthated Magne	sia Tabs.	,, 6/6	,,				•
Blauds & Cascara					4/-	8/9	4/6
. Calcium Lactate, gr.	. 5				3/9	8/-	3/-
	·				3/3	5/9	1/9
× Cascara Ext., gr. 2					3/-	7/6	3/3
Cinnamon, Influenza	ı		per doz.		·	·	4/-
Cold Cure, tins		20s 4/-	per doz.		6/-	18/6	12/6
Easton's Syrup, dr.	$\frac{1}{9}$				4/6	11/9	6/6
,, ,, dr.	1				5/9	16/6	10/6
×—× Formalin Mint		50s 6/6	per doz.			·	
Gregory Powder, gr.	.5				4/3	10/6	5/6
Hexamine, gr. 5					4/6	11/9	6/6
Hyd. c. Creta, gr. 1					2/6	5/3	2/6
Hypophosphite Com	p., dr. 1			,	5/9	16/6	10/-
Laxative, Vegetable					4/6	11/9	6/6
Lithia, Effervescing		. 40s 10/6	per doz				
Pepsin, gr. 2					5/3	13/3	9/6
Y—Phenacetin, gr. 5					5/3	12/9	7/6
× ,, & Caffe	in Cit				5/6	15/3	9/6
Quinine Sulph. or B	isulph., gr.	1			4/9	13/-	8/
	., gr.	2			7/3	21/6	15/-
Regulators					5/-		7/6
Sodamints F Pepper	mint Oil					4/_	10d.
E ,,	,,					4/3	1/9
Sodii Cit., gr. 2					3 6	6/9	2/6
Thyroid, gr. 2			• •		4/6 -	11/9	
" gr. 5	••		• •	• •	6/6	19/–	13/
CADDIA	ICE D	AID	OM	£ 2	OPD	EDC	

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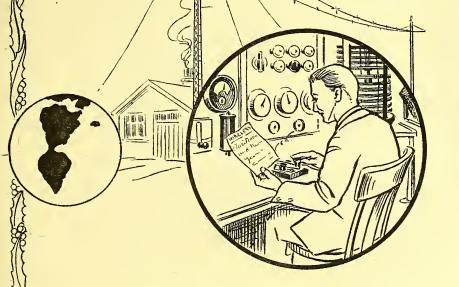
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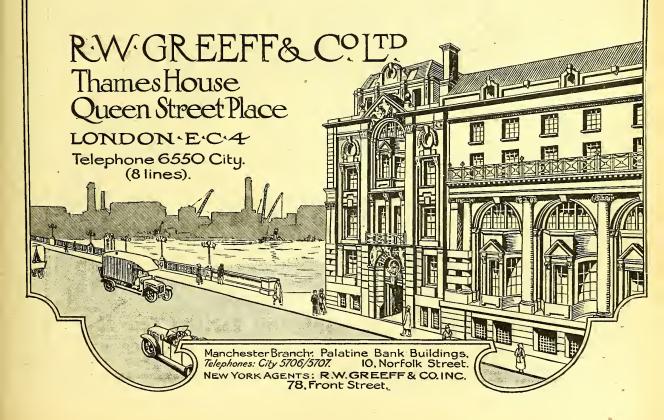
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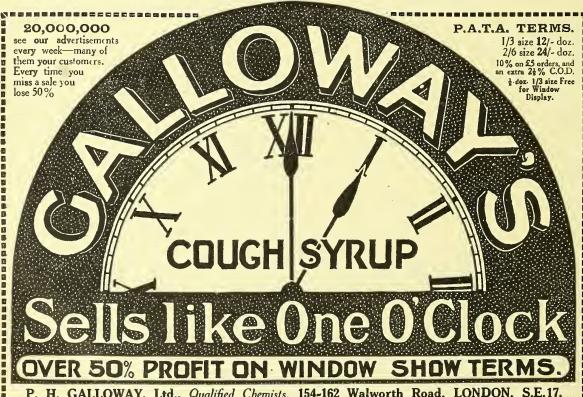
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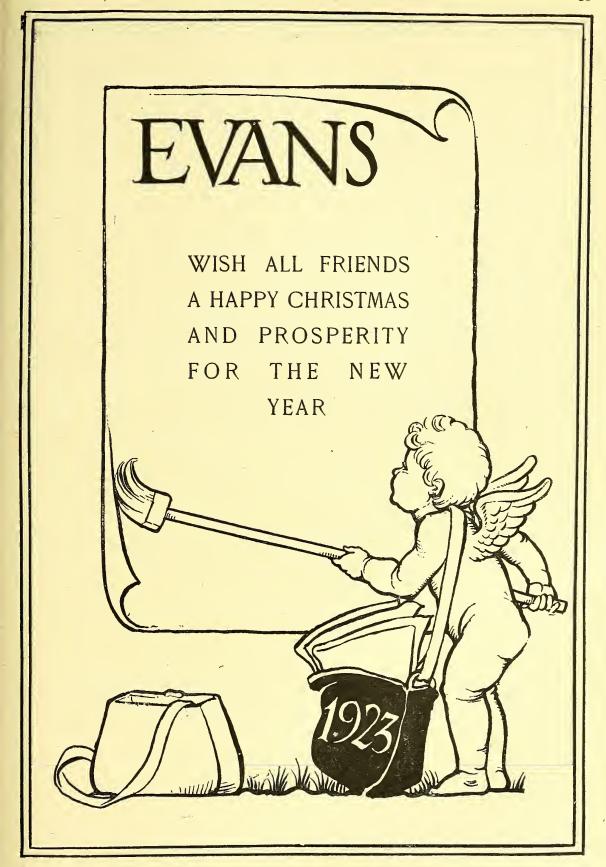
all our Friends we wish a very Christmastide and all Prosperity in 1923.

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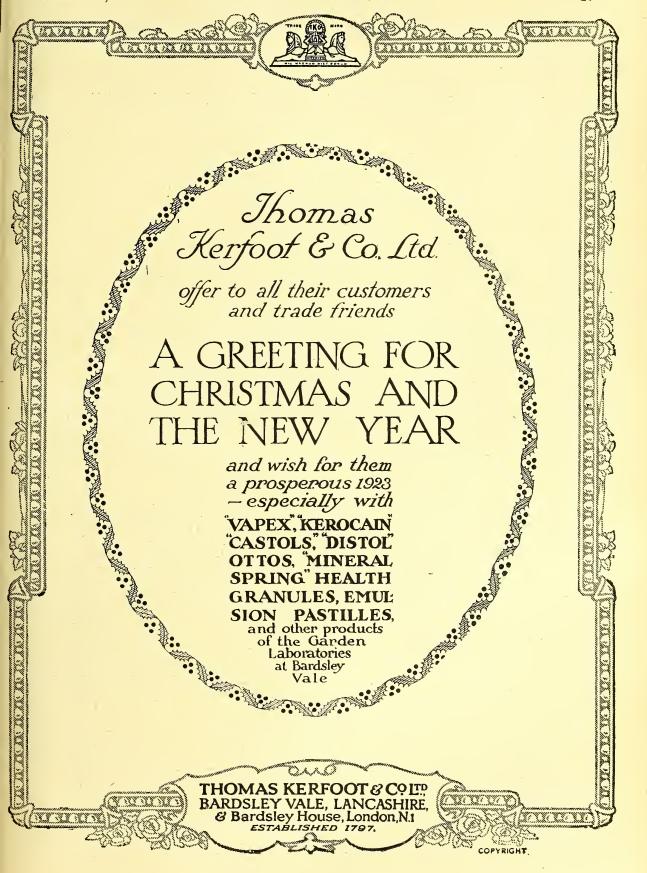
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The Principals & Staff of Westminster College of Pharmacy

send the Season's Greetings and Best Wishes for success to past, present and future students.

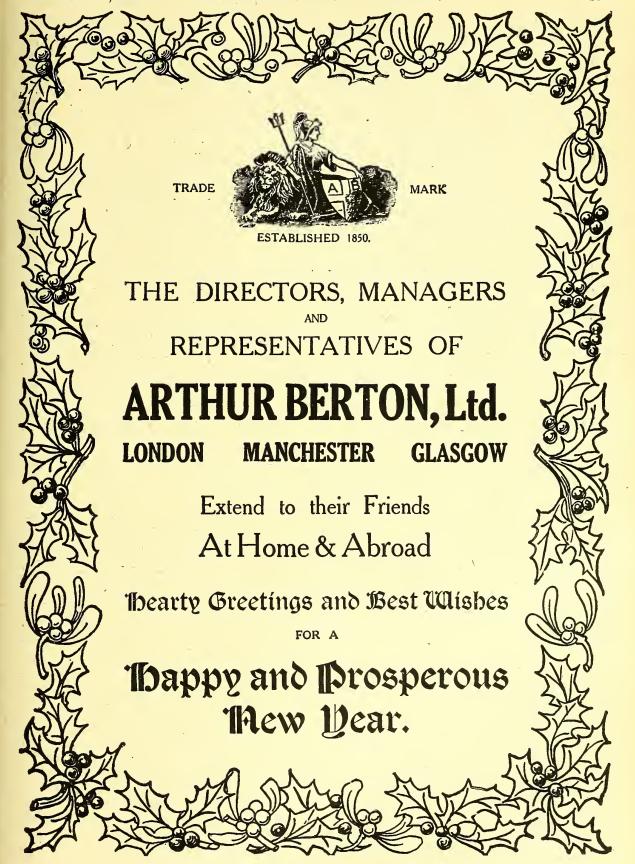
190 Clapham Road, London, S.W.9,

To all Cyanides, past, present, and future:

GREETINGS

- - and best wishes for - - Christmas & the New Year.

The Principals, London College of Pharmacy, 361 Clapham Road, S.W.9.



The Season's Greetings

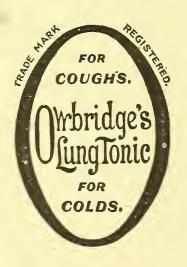
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and

Good Wishes

for the New Year.

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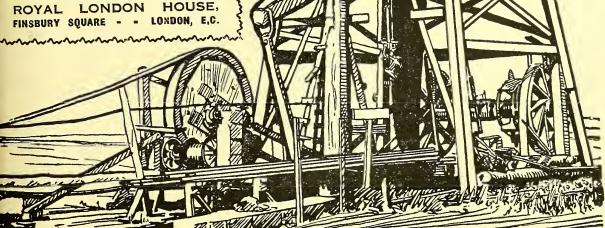


We heartily wish all our friends a HAPPY XMAS and PROSPEROUS NEW YEAR.

Coupled with our sincere wishes is the hope that the fine quality of our products, which include

PETROLEUM JELLIES WHITE OILS PARAFFIN LIQUID

will add to the still greater prosperity of our numerous customers.



Christmas 1922.

New Year 1923.

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sincerely wishes every pharmacist a joyous Xmas and a prosperous, profitable New Year.

Increase your 1923 turnover by pushing Glaxo

REMEMBER:

that every tin of GLAXO we pack shall only be supplied to the retail drug trade or to Authorised GLAXO Distributors who have agreed to supply the drug trade only and to account for every tin sold."

Glaxo Service Bulletin, Dec. 1922.

THAT MEANS

Glaxo for the Pharmacist A 20% Guaranteed Profit No price cutting

SALES DEPT.;

GLAXO HOUSE, 56, OSNABURGH STREET, LONDON, N.W.1

Potter's Asthma Preparations



POTTER'S RETAIL, WHOLESALE.

ASTHMA CURE - 1/6 14/-

,, CIGARETTES 1/6 14/-

,, SMOKING MIXTURE 9d.

ADVERTISED EVERYWHERE.

We wish our friends in the Drug Trade A HAPPY CHRISTMAS and a PROSPEROUS NEW YEAR

"FIVE BARKS" Chest and Lung Jubes

Registered Trade Mark.

Retail 2d. per oz.

7d. per quarter lb.



Over 200 Tons sold during the last four years.

POTTER & CLARKE, Ltd. 60-64 Artillery Lane, LONDON, E. And 24 Luna St., Great Ancoats, Manchester.



BURGOYNE'S

send heartiest greetings with best wishes for

XMAS

AND THE

NEW YEAR

to their many friends in all parts of the world.

9

May 1923 bring with it concord among the nations, and enduring peace with prosperity for all.

BURGOYNE, BURBIDGES & Co., Ltd. EAST HAM, LONDON, E.



Christmas 1922 New Year 1923

May you experience a Happy Christmas and a New Year of Success & Prosperity.

T.&H.SMITH, Ltd.

EDINBURGH: Blandfield Wks.

LONDON:

GLASGOW: 25 Christopher St., E.C. 32/4 Virginia St.

MORPHINE CODEINE CAFFEINE STRYCHNINE CAPSICINE

GINGERIN SALICIN EMETINE CHLOROFORM CANTHARADIN THEOBROMIN

ERGOTIN JALAP RESIN SCAMMONY RESIN ALOIN PODOPHYLLIN

Grand Prix, Paris 1900

Grand Prix, London 1908

Grand Prix, Brussels 1910

The Compliments of the Season

We greet all our friends with best wishes for Christmas and the New Year, and we hope that during 1923 they will have a full measure of Happiness & Prosperity.

FINE CHEMICALS

for Scientific purposes and for College and Technical Institute Laboratories.

PHARMACEUTICAL CHEMICALS of Standard Quality for Manufacturing and Dispensing.

PHOTOGRAPHIC CHEMICALS in bulk or ready Packed for Retailing. RADIUM and RADIO-ACTIVE MINERALS

MINERAL and GEOLOGICAL SPECIMENS and SETS

TECHNICAL CHEMICALS
for Glass, China, Enamel, Varnish, and
other manufacturing purposes.

AGRICULTURAL CHEMICALS
Fertilizers, Insecticides, etc.

Harrington Bros. Ltd.

Manufacturing Chemists,
4 Oliver's Yard, City Rd.,
London, E.C.1.

CONTRACTORS TO H.M. GOVERNMENT PRICE LISTS FREE ON APPLICATION

Telephone: Clerkenwell 1007, 1008.

Tel. Add.: "Siccusive, Finsquare, London."

SANTONINE

The Season's Greetings

to all in the Trade

Thanks for past favours and best wishes for your Prosperity during the New Year.

THE EASTERN & RUSSIAN
TRADING CO. LTD,
"TERTCO"

8 Drapers Gardens, Throgmorton Avenue, London, E.C.2.

HEARTY GREETINGS XMAS 1922

and BEST WISHES for a prosperous and successful 1923 to all our many friends, from the Firm and Staff.

T. H. FORD LTD.,

6 WELL ST., JEWIN ST., LONDON, E.C.1.
Phone: City 6343. Telegrams: "Drofcolym" Cent. London.
Code: A.B.C. Fifth Edition



Tel.: 426 Royal. 33 Henry Street, LIVERPOOL



On this, our first Christmas, we greet the trade with thanks for their favours, and best wishes :: for their prosperity ::

Essences & Synthetics, Ltd.

4 Carlisle Avenue, Fenchurch St., London, E.C.3

ACID ACETO SAL., B.P. SALICYLIC ACID, B.P. BENZOATE OF SODA, B.P. BENZOIC ACID, B.P. BENZYL BUTYRATE

GERANIOL
GERANYL BUTYRATE
IONONE
VERT DE VIOLETTE
LINALOL

LINALYL ACETATE
METHYL SALICYLATE
PARACRESOL
ACETATE
MOUSSE DE CHENE

OIL GERANIUM RHODINOL SPANISH SPIKE SPANISH ROSEMARY ETC., ETC.





What "Users" say:

The number of unsolicited testimonials to the wonderful results obtained with NUCTONE would fill a book.

Here are some of the words used to express their satisfaction—"Delighted," "Excellent," "More than pleased," "Nothing like it," "Just what I wanted," "So easy to apply," etc., etc.

Has Solved the Grey Hair Problem

NUCTONE is the discovery of an eminent Hair Specialist. Restores the colour gradually, permanently, safely. Guaranteed free from any injurious ingredients such as sulphur or lead.

Repeat Orders Assured

Customers who try NUCTONE continue using it, they are so delighted with the results. This means a steadily increasing business for the Retailer.

Retail Price 6/6 per Bottle Trade Price 48/- "dozen

Manufactured by-

Stewart, Goodall & Dunlop, Ltd. 4 Dering Street, LONDON, W.1

Stocked by Leading Wholesale Houses.

CHLOROPHYLL

HIGHEST QUALITY.

ABSOLUTELY PURE.

UNIFORM DELIVERIES.

CHLOROPHYLL C. CHLOROPHYLL CC. CHLOROPHYLL S. CHLOROPHYLL P. Oil soluble. Blue Shade. Oil soluble. Yellow Shade. Water and spirit soluble.

Soluble in 70% to 100% alcohol.

THE SANDOZ CHEMICAL CO. LTD., BRADFORD.

DODGE & OLCOTT CO., LONDON

LONDON, E.C. 3.



THE "D & 0" BRAND

is the "Standard of Quality" for

J

OILS of BAY, CEDARWOOD, PATCHOULI, PEPPERMINT, SASSAFRAS, ETC.

BALSAMS of Copaiba, Peru, Tolu. TONKA BEANS, Angosturas.

Phone— CITY 2468. Telegrams—
"EGDARF; FEN, LONDON."

WORKS
POLICE
H. RAAB & CO.
ROERMOND, HOLLAND.

Manufacturers of

Base Perfumery Products and Flower Oils.

- RACO -

MUSK AMBRETTE c.p. 100°/.

MUSK KETONE c.p. 100°/.

MUSK XYLOL c.p. 100°/.

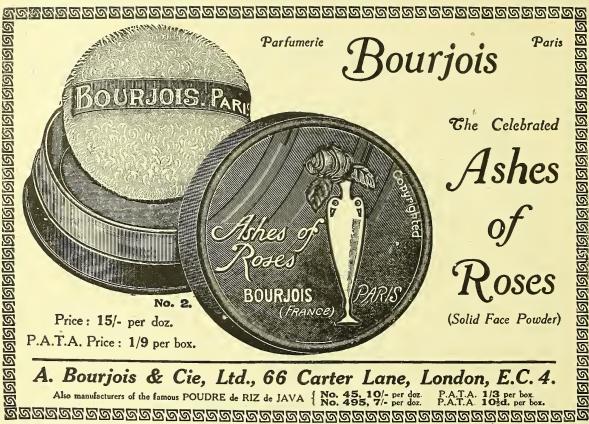
OLEUM-MUSK art.

generally regarded as the STANDARD.

Sole Representative for the U.K.:

ALFRED PAUL WHITE, 5 Water Lane,

Gt. Tower Street, LONDON, E.C. 3.



JAKSON'S PEPPERMINT, LAVENDER & CAMOMILE OILS

are the BEST.

Produced and Prepared by

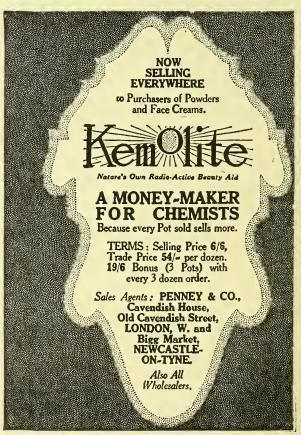
THE LARGEST GROWERS & DISTILLERS IN ENGLAND.

Distillery:

J. JAKSON & CO. (Mitcham Rd., 1921), LTD.
Mitcham Road, WEST CROYDON.

AGENTS for the U.K.:

F. NEWBERY & SONS, LTD. 27 & 28 Charterhouse Square, London, E.C. 1



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A STRIKING NOVELTY BY DEARBORN LIMITED.

The Ambedia Back Puff

PATENT No. 182060.



THIS useful appliance has been designed to fill a

Long-felt Want.

Ladies will welcome and appreciate a Puff by the use of which they are enabled to dispense with the assistance of a maid, and powder their backs themselves.

We are advertising extensively in the Daily Press and Leading Ladies' Journals, and

advise you to be prepared to meet the demand by having a few in stock.

PRICE TO THE SELLING AT

11/3 Nett. 15/~ P.A.T.A.

May be obtained through all Wholesalers, or direct from the Sole Licensees and Manufacturers:

INN ROAD, LONDON, W.C.1.

Patents pending in all the principal countries of the world.



This very High-class

FRENCH BATH TOILET SOAP

neatly packed in Fancy Boxes containing 12 tablets, weigh 5½ ozs. each, assorted perfumes, guaranteed pure, packed in cases of 50 doz. at 33/= per gross, f.o.r. London.

KALISKY

Phones: 704 and 329 East.

Armour's Pure Glyc.

@ 24/~ gr.

Chicago

@ 20/- gr.

Milk Soap @ 16/- gr. Visitors' Toilets

@ **5/6** gr.

Write for our Prices. Lists of wonderful Bargains in Toilet Soaps.

mmm

Talcum Powder ⊕ OF ALL GRADES ⊕ FOR ALL PURPOSES

FOR SAMPLES AND PRICES APPLY TO:

W. Harrison & Co., Ltd. 16 MINCING LANE, LONDON, E.C. 3;

14 MARKET PLACE, MANCHESTER.

I solicit your enquiries for MEDICAL FLATS in all sizes, plain and graduated, MEXICANS, POISONS, KALIS, LIMES, VIALS, CANNONS, OVALS, BRILLIANTINES, in all shapes, SCREW JARS, TABLET BOTTLES, etc. etc. All bottles used in perfumery and chemist trades. Special shapes made. Wholesale quantities only.

G. VAN DER HOEK, 324/5 Bank Chambers, 329 High Holborn, LONDON, W.C. 1:

THE "JARASO" Personal Weighing Machine BRITISH PATENT No. 23493/1910 Small and Compact. Weighs from I lb. to 20 stone. Suitable for Bathroom, Bedroom, Nursery, etc.

The weight is reflected automatically in the mirror.

SIZE $11 \times 7\frac{1}{2} \times 8$ inches. WEIGHT 19 lbs

RETAIL PRICE REDUCED AS FROM JANUARY 1 NEXT TO

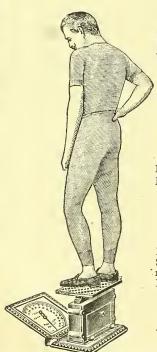
each

Liberal terms to Wholesale Houses, Shippers and Export Merchants for re-sale in Great Britain, Ireland and British Colonies only.

All particulars from:

C. SHOPPEE,

Belmont Street, Chalk Farm, London, N.W.1.



For Men, Wom in, or Children.

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The

HENNA CULT

of Hair Beauty, based on the famous

EVAN-WILLIAMS ORIGINAL

HENNA SHAMPOO

daily extends its boundaries, and is now a subject for popular journalism.

It pays to sell this famous line.

You will find full details of terms and prices in the current issue of "THE SHAMPOO SALESMAN," a copy of which is gladly sent on request.

Be sure to order



Wholesale only: THE EVAN-WILLIAMS CO., LTD. 18 Ogle Street - LONDON, W. 1.

EARBORN

Gray's Inn Road, LONDON, W.C.1.

Toilet Specialties.

•		Price	Selling Price	믬
		per doz. to Retaile	r P.A.T.A.	6
PILENTA SOAP		10/-	1/-	6
PROLACTUM		10/-	1/-	回
For the lips. PARSIDIUM JELLY	•••			<u></u>
	•••	10/-	1/-	
ALLACITE OF ORANG	ΉE			븕
BLOSSOM		22/6	2/6	
A dressing cream.		00/6	0/6	0
BORANIUM	•••	22/6	2/6	回
CLEMINITE	000	22/6	2/6	
For a face lotion. COLLIANDUM		22/6	2/6	6
For a face tint.	•••	22/0	2/0	
PERGOL		22/6	2/6	0
TEKKO PASTE		22/6	2/6	回
Camphor cream	•••	ŕ	·	
STALLAX	•••	22/6	2/6	븕
For a shampoo. JETTALINE		31/6	3/6	
For clearing the skin.	•••		•	叵
PHEMINOL	•••	36/-	4/-	回
MENNALINE	•••	36/-	4/-	
For the eyelashes.		•	·	븕
MERCOLIZED WAX A face cream.	•••	31/6	3/6	6
STYMOL		36/-	4./-	回
For oily complexions and b		heads.	0/6	厚
SILMERINE Hair-curling fluid.	•••	22/6	2/6	
BARSYDE		22/6	2/6	高
Dandruff eradicator. TAMMALITE		22/6	2/6	0
For grey and faded hair.	•••	22/0	2/0	回
LIQUID PERGOL		31/6	3/6	回
BICROLIUM	ation		2/6	
For whitening the hands.	•••	,	2,0	
HARAPOSA	• • •	22/6	2/6	回
Nut oil shampoo.		31/6	3/6	回
For figure development.	•••	0.,0	0,0	唱
The Products	o f	•		
Messrs. PARKER, BELL			CO.	
OT WHAT PEDDIES	ſ	36/-	4/-	
CLYNOL BERRIES For obesity.	f	58/6 .	6/6	回
SOFT PALERIUM		45/-	5/-	
For wrinkles.		,		쁩
TIOTITE NATE POLISH		10/-	1/-	

LIQUID NAIL POLISH ...

Stocked by ALL Wholesale Houses.

COLONIAL DEPOTS AND AGENCIES.

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COLONIAL DEPOTS AND AGENCIES.

Australia: ALI, WHOLESALERS, & DEARBORN (Australia), Ltd., Grace House Clarence Street, Sydney.

South Africa: LENNON Ltd, Cape Town.etc.
SIVE BROS. & KARNOVSKY. Johannesburg.

India: FRAMJEE & SON, Wombay
SMITH, STANISTREET & CO., Calcutta.

New Zealand: SHARLAND & CO., Auckland & Wellington.

South America: DEARBORN (South America), Ltd.. Calla Salta 264, Buenos Aires

Straits Settlements & Federated Malay States: MEDICAL HALL, Ltd.. Singapore

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THIS ADVERTISEMENT is consistently appearing in the following well-known Journals:

STRAND—NASH'S—LONDON—WINDSOR—PEARSONS—CHAMBERS—WIDE WORLD—BLACKWOOD'S—PUNCH—LONDON OPIN, ON JOHN O' LONDON—BRIT(SH WEEKLY—ETC.

Total Circulation 11 Million

WE ARE RECEIVING LARGE NUMBERS OF DIRECT ENQUIRIES FROM THE PUBLIC:

'Culmak' Shaving Soap

IS PARTICULARLY IN GREAT DEMAND.

Both "Culmak" Brushes and Soap have been awarded the very exclusive certificate of the Incorporated Institute of Hygiene.

SEND US YOUR NAME

stating if you stock both or either; WE CAN SEND YOU CUSTOMERS.

"CULMAK,"

48-50 DURHAM ROAD, LONDON, N.7.

SPONGES

OWING to the increase and continued development of their Sponge Department, the Soc. Anon. CHIAPAS have formed a Subsidiary Company, which will deal in future exclusively in Sponges, under the title of

THE SPONGE FISHING AND IMPORTING CO.

The direction and management remains the same as hitherto, and the only change is practically in the name. Send your enquiries for prices and type samples as before to

32 Queen Victoria Street, London, E.C.4.

Telephone : City 5824.



G. B. KENT & SONS, LTD.

Are known the World over as the Largest Manufacturers of

BRITISH

Please write for full Particulars to-

75 Farringdon Road, E.C.1.

_the final touch THE NUPINES COMPETITION

ERE's something that's going to put the final touch to the success of the Nupines Advertising Campaign. We have devised a new, quite unique competition; one that scores in every way. It has the widest possible appeal, being suitable for both young and old; there are prizes to please all. It is simplicity itself—no complicated rules or conditions. The only entrance fee is a box of Nupines.

£500 TO BE GIVEN IN PRIZES

It is little that we ask you to do; just keep some competition leaslets on your counter for your customers to take—that's all. And should a customer win a prize, then you receive a gift from us also.—A supply of competition handbills on request.

This all sounds pretty good, doesn't it?

But there's more to come.....

Our New Year's advertising will be trebled. As leader we have a whole Daily Mail page on January 20th. And in all this advertising, from January to March, we shall make a special feature of the Competition.

Now you know what kind of demand the Competition and increased advertising will bring, don't you? But perhaps you don't. So we warn you now—don't be caught napping. There is going to be unprecedented business done with Nupines—it will be one big rush.

Stock at once—and get your share.

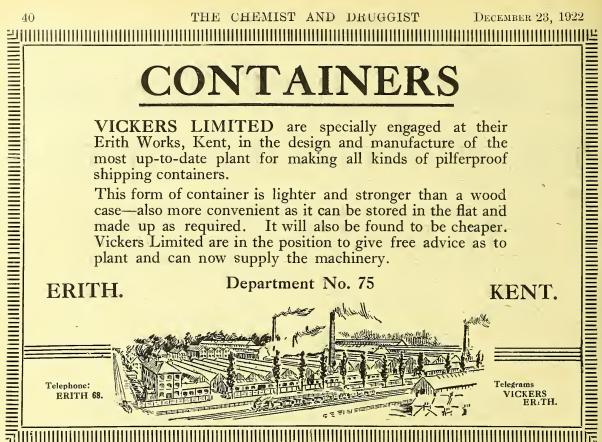
48/PER GROSS



Carriage Paid
Terms £2
Cases and
Containers Free.

London: 37 Red Lion St., High Holborn. Tel.: Chancery 7416. Glasgow: Bath Chambers, 65 Bath St. Tel.: Douglas 459





Destroys Germs.

KILLS GERMS PURIFIES THE AIR

Approved by Eminent Bacteriologists.

(Awarded the Order of Merit by the Council of the Institute of Hygiene.)

Ideal Reform Outfits

consisting of Nickel pump Sprayer, Filter Funnel and Concen-

trated Essence to make

Disinfectant. Greatest Atmospheric World's

USED DAILY FOR SPRAYING OFFICES, FACTORIES, INSTITUTIONS AND THE HOME.

Complete Outfits Consisting of Sprayer, Filter Funnel, and Size (a) Container sufficient to make 2 Gals. £1 1 0

> Refills. Size (o) 6/9 ., (a) 12/6



Size (b) 17/6 Trial bottles 1/9

1 qt.

EXPORT ENQUIRIES INVITED FOR

SPRAZONE (Standard) **ATMOSPHERIC** DISINFECTANT. SPRAZONE (FLY) SOLUTION.

Foreign Agencies Entertained.

LIBERAL TRADE DISCOUNT

United Laboratories & Chemical Co.

Regd. Office: 97 Queen Victoria St., London, E.C.4 Laboratories: Causeway House, S.E.1 "TREATISE ON THE HOUSE-FLY."—A scientific and interesting pamphlet just published, 3d. Post Free.



When ordering your next supply of tubes remember that Venesta collapsible tubes possess a quality and finish that make them a real selling force.

They are made from Pure Tin, Lead or Lead-coated with Tin and supplied plain or enamelled and printed with designs to suit customers' own requirements.

We also supply Lip-salve Cases, Sprinklers, etc., and shall be pleased to forward illustrated lists, samples and current prices on application to—

G. Dept.

VENESTA LTD.

1 Great Tower Street, London, E.C.3.

Actual Manufacturers of TINFOIL.

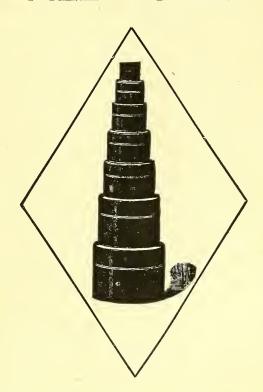
Plain, coloured and embossed in any size, gauge or shape.

MENTION

ROBINSONS' MAKE

WHEN ORDERING FROM YOUR WHOLESALE HOUSE YOUR NEXT SUPPLY OF

PILL BOXES



BRITISH MADE BY BRITISH LABOUR.

SUPPORT HOME INDUSTRIES.

ROBINSON & SONS, LTD.

BOXMAKERS TO THE CHEMIST TRADE

CHESTERFIELD.

50



FAIRY

Mean Greater Turnover for You—and Absolute Satisfaction for Your Customers.

THERE is no more attractive line on the market to-day—there is no better seller—and no article has made larger strides in popular favour.

are now sold in glass tubes, encased in smart, clean-looking "safety-first" cartons. They are retailed at 2d. each, made in 25 popular shades and colours, and are extensively advertised in the right publications.

You can rely upon Fairy Dyes—for prompt delivery in any quantities—for fresh stocks—for quick, easy-to-handle, clean turnover, and as tried favourites your customers are always satisfied. See that you are supplied without delay.

For Trade Terms and particulars write to

37-41 GLASSFORD ST.,

GLASGOW.

292 UPPER STREET, ISLINGTON, N.1. London Depot

There's BIG MONEY in **AMATEURS**

when done the unrivalled "Developrint" Suggest to your customers turning their best snapshots into pict res, and secure good winter business when the ordinary photographic season is dead.

WRITE TO-DAY FOR DESCRIPTIVE PRICE LIST.



PHOTOGRAPHIC ENLARGEMENTS.

Quality Work at the Right Price. Prompt Delivery. Good Profits. TRADE LIST FREE ON REQUEST.

Wallace Heaton, Ltd.

17-27 CHANGE ALLEY, SHEFFIELD.

RGEMENTS Rich, Deep & Velvety.



These are the qualities you get when you send your orders to us, AND QUICK DISPATCH, 4 DAYS.

Remember a satisfied Customer is your best advertisement—it is ours too!

WRITE FOR TRADE LIST FREE.

EXPRESS DEVELOPING CO. 296 High Road, Streatham, S.W. 16

Telegrams: "Expredeve Streath."

Phone: STR. 470

C. MELIN & CO.

ESTABLISHED 1865.

7 INDIA ST., CRUTCHED FRIARS, LONDON, E.C. 3.

VACUUM FLASKS GLASS BOTTLES GLASS AMPOULES

TUBES

PUSH-ON CAPS AND CORKED.

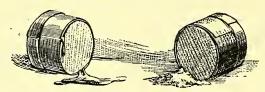
DIRECT FROM THE WORKS. WHOLESALE AND EXPORT.



"Corruganza" SEAMLESS INTMENT BOXES

Have replaced the old "Willow" boxes— Greaseproof—the bottoms cannot fall out.

GERMAN "WILLOW" BOXES are again being offered at lower prices, but these boxes will not hold Powders, nor, in warm weather, Ointments.



THEY ARE DEAR AT ANY PRICE.

Stick to the ONE-PIECE principle

"Corruganza" SEAMLESS PILL BOXES.





"HE phenomenal success of the "Corruganza" Seamless Ointment Boxes has resulted in our manufacture of Pill Boxes made on just the same One-Piece principle. Stocked in usual sizes. They cost a little more than the Ring and Disc style, but THEY HOLD THE GOODS, and do not fall to pieces in handling or in the pocket.

Wholesale or Export only from

LIMITED,

Summerstown Works, London, And at Manchester, Birmingham, Leith, Perth & Glasgow. Kindly mention this Journal when replying to the advertisement.

MILLAR & CO., LTD.,

JRANTII B.P.)

Prepared in strict accordance with the Formula of the British Pharmacopæia. (Whol sale only, Samples from Head Office, Thomas Street, DUBLIN, or London Office, 74 Great Tower Street, LONDON, E.C. 3. (VINUM AURANTII B.P.)

FREDK. FINK & CO.,

10 & 11 MINGING LANE, LONDON, E.G.3. SPECIALITIES.—Cums Arabio and Tragacanth as imported or finely powdered.

'KEEP THE PHOTO FIRES BURNING'

by pushing the sale of enlargements. All work is executed by the Kodak Projection Enlargers. Lantern Sildes and Transparencies finished in a few days. Show-Cards and Price Lists on application.

"FORBEST LIMITED," 171a Brook St., BROUGHTY FERRY

SHADEINE

FOR COLOURING GREY HAIR

Thie popular article ie largely advertised and et cked by all Wholesale Houses.
Trial Size 8d. per post 10d. 1/4 eize, per post 1/7; 2/6 size, per post 2/11; 3/9 size, per post 4/6; 8d size, 6/- doz.; 1/4 size 13/- doz.; 2/6 size, 24/- doz.; 3/9 size, 86/- doz THE SHADEINE CO., 58 WESTBOURNE CROVE, LONDON, W.

REAL SILVER LEAF

As supplied for many years to the leading Houses for Pills, Cachous, &c We also supply

GOLD LEAF

GOLD POWDERS AND WHOLESAL O LY.

E. WINTER & CO., LTD.,

Head Office: 64 Cheapside, ondon, E.C.2. Telephone: Central 985

TO CHEMISIS and DRUG STORES. IT PAYS to sell FARMERS "BAITED"

PHOSPHOR PASTE

Made from an improved formula. It is the BEST RAT and M USE, POL ON IN THE WORLD.

Jars 4d., 7d., and 13. KINDLY OLDER from SUNDRY HOUSES.

ONE USER recommends to another.

Export Agents: AY ATON AUN ER & J., TD. Duke Street,
Live pool.

Manuf cturers: F: FARMER & CO. HOMERTON, LONDON.

ART OF DISPENSING. (9th Edit.) 8/-, by post 8/9. VETERINARY COUNTER PRACTICE.

7/6, by post 8/3. CHEMIST'S DICTIONARY OF MEDICAL TERMS.

3/6, by post 3/10.

The CHEMIST & DRUGGIST, 42 Cannon Street, E.C.4.

DUSTERS and TOWELS Pharmacy,

Special Offer at Manufacturer's Prices!!

12 Blue Check Dusters 22 × 22 | 12 Plain Polishing Cloths 17 × 20

The LOT Post Paid 26,6

Half the above parcel 13/9 Post Paid. Terms—Cash with Order

Dept M.P.S. T EGGLES & CO., Kay's Mill,

41 (Idfield Rd., Salford, Manchester.

ALL CHEMISTS 3 • SHOULD STOCK

THE GOLD MEDAL FRUIT DRINK.

Oulck Seller. Big Profits. Over 40 years' Reputation.

"Abdine" is the most popular Health Drink, superior to all Mineral
Waters. The Original and only genuine Fruit Drink.
Reduced Prize Lyst can be had on abblication.

DUNCAN McGLASHAM, LTD., ABDINE WOFKS, WESTFIELD RGAD, EDINBURGN.

CIGARS for XMAS

HAVANA AND BRITISH IN ALL PAUKINGS.

Write to The London Dealers for Wholesale Price List of London's lowest prices. Encl to any Wholesale House. Enclosures sent

SADLER & MOORE, Spital Square, Bishopsgate, E.1

MANICURE SETS

Seven Implements, Silk Lined with Cloth Bottom in Imitation Leather Case .. 48/- dozen

Carriage extra. SAMPLES 5s, post free, returnable. Terms, Cash with order. BARGAIN LIST SENT ON APPLICATION. L. FRANKENBERG, 15 Stoney Lane, Houndsditch, E.1
'Phoue: BANK 448.

BOOKS FOR PHARMACISTS.

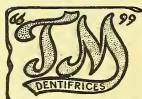
Send us a postal card and we will send you a 32 page c talogue of professional and business books for pharmacists, and a copy of

"THE SPATULA"

an illustrated monthly magazine for druggists, full of American snap and enterprise.

THE SPATULA, BOSTON 14, MASS., U.S.A.





99 THE TOOTH PASTE FOR SMOKERS

I/- P.A.T.A., 7/6 per dozen. ½ dozen Bonus on 3 dozen. The Powder-6d. P.A.T.A., 3/- per dozen. 3 dozen of each allows us to send the "Peak" show that makes a profitable "stir" anywhere.

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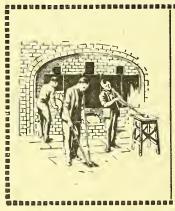
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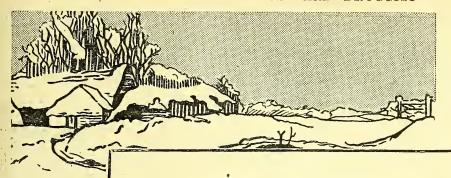
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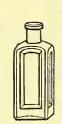
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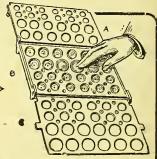
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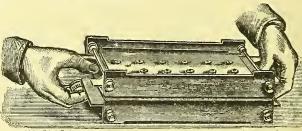
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C. & D. Stock-taking Sheets

For the purpose of halving the labour of taking stock by chemists, we have prepared pads of Stock-taking Sheets, based on the C. & D. Retail Price List, of drugs, chemicals and galenicals. The items are arranged on ruled paper in the same order as in the C. & D. Retail PRICE LIST, which is afterwards employed for pricing out the articles, the amount of each column being then trans-Hints on stock-taking are given on the inside of the cover. The items in the Stock-taking Sheets cover all drugs, chemicals and galenicals found in chemists' shops, and, being in alphabetical and cover size of the cover. being in alphabetical order, are easily found for entering up. By means of the Stock-taking Sheets one person can take stock, but it is better for two assistants to work together, the more experienced calling out the quantity of the drug, etc., and the other entering it 1 the Stocktaking Sheets.

The price of the complete pad of Stock-taking Sheets is 2s. 6d., post free, cash with order.

There is just time to obtain the stock-taking sheets for use at the end of this year.

English and Welsh News

The Editor would be obliged if subscribers would send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

Dental Board

-Applications for registration have been received from the following persons on the ground that they are pharmaceutical chemists or chemists and druggists, and that immediately before July 28, 1921, they had a substantial practice in dentistry in the course of which they personally performed such operations and gave such treatment, advice and attendance as are usually performed or given by dentists. Any objection to registration must be lodged within one calendar month from December 15, and must be supported by evidence sufficient to show a prima facie case against registration :-

Jones, Evan, 11 Cowell Street, Llanelly.

McClelland, Henry Thompson, Main Street, Ballyshannon.

Mockler, John, Thurles.

Nolan, William Joseph, 43, Main Street, Dungarvan, co.

Waterford.

Vasey, Frederick William, 83, Oxford Road, Reading. Vaughan, John, 67, Barrack Street, Nenagh.

Chemists' Dental Society

A conference, presided over by the chairman of the Dental Board, the Right Hon. F. D. Acland, M.P., was held on December 14 at the headquarters of the British Dental Association, 23 Russell Square, London, W.C., between representatives of the Parliamentary Committee of the Co-operative Congress and the Dental Societies regarding dental benefits. The Chemists' Dental Society's representatives were: Mr. S. V. Brook, Mr. J. J. Laws, and the hon. secretary, Mr. J. W. Roberts.

British Trade Prospects

Measured optimism as to our industrial outlook was the tone of the speech of Colonel Armstrong, the retiring President of the Federation of British Industries, at the annual meeting held in London at the Hotel Cecil on December 14. The results of the past ten months' trading, he said, justified the belief that we had touched bottom, and that any further movement was likely to be in an upward direction. In some measure justification could be found for the belief that trade conditions were improving. There was a slight betterment in the position compared with 1921, both in actual values and in the wider spread of the improvement over various industries. But, he pointed out, industries had to provide funds for charges undreamt of in 1913. The present national income did not equal that of pre-war times, and if national expenditure were maintained at anything like its present level, it would strain their powers to meet their liabilities and balance the Budget. Restrictions that were being imposed almost everywhere by hostile tariffs required prompt and energetic action. Sir Max Muspratt said that although he thought Colonel Armstrong's speech was slightly too pessimistic, he hoped the Federation would always look facts in the face. The outlook, so far as industrial peace was concerned, had, in his opinion, never been brighter.

Anthrax Committee

The International Committee on the prevention of anthrax, the personnel of which was announced in the C. d. D., December 2, p. 759, met in London on December 15. Mr. F. Duckering (Home Office), Mr. Legge (chief inspector of factories), and Messrs. Albert Thomas and Butler, of the International Labour Office, attended in order to give expert opinion. The Committee proposed that the governing hody of the International Labour Office. that the governing body of the International Labour Office should include on the agenda of the next Conference of the League of Nations a draft convention established on the following lines :-

That hair used in the brushmaking and upholstering industries be disinfected before the materials are handled industrially except in the following cases:—

(a) If the country of origin is included in the schedule of countries where the danger is slight.

(b) If the material imported is disinfected before being

(b) If the material imported is disinfected before being put on board ship by a process recognised as effective.
(c) In such other cases as may be determined by the Advisory Committee on Hygiene constituted by the International Labour Office, or the governing body of the International Labour Office, on the advice of the above Committee, or if necessary on the recommendations of the Health Committee of the League of Nations.

The chairman mentioned that in Great Britain no fewer than 183 cases (of which 38 were fatal) were traced to brushes other than shaving brushes. Mr. Legge said that only five of these 183 cases were directly traceable to pig bristles, while the percentage as regards horsehair was much higher. Mr. Gilbert proposed that pig bristles be excluded from the regulations of disinfection, and the Committee unanimously agreed.

" Christmas Benefit Week"

Tonking & Rough, The Pharmacy, St. Just, have organised for the benefit of miners and others in the district who may be in need, a "Christmas benefit week," during which they are distributing invalid foods and responsible persons. The value of the subscriptions and gifts in kind represented by a list that we have received must be considerable. The following are among the contributors :-

Allen & Hanburys, Ltd.; Ashton & Parsons, Ltd.; John Bell, Hills & Lucas, Ltd.; Benger's Food, Ltd.; The British Drug Houses, Ltd.; E. Burgess; W. J. Bush & Co., Ltd. (Mr. W. H. Higgins); Capsuloids (1920), Ltd.; Coleman & Co., Ltd.; Everyl, Ltd.; Evans Sons Lescher & Webb, Ltd.; F. Fox & Co.; D. & W. Gibbs, Ltd.; Thomas Hodgkinson, Preston & King; Horlick's Malted Milk Co.; Jeyes' Sanitary Compounds Co., Ltd.; Thomas Kerfoot & Co., Ltd.; S. Maw, Son & Sons, Ltd.; May, Roberts & Co., Ltd.; Oppenheimer, Son & Co., Ltd.; Oxo, Ltd.; Parke, Davis & Co.; A. & F. Pears, Ltd.; Southall Brothers & Barclay, Ltd.; The Thermogene Co., Ltd.; Tonking & Rough; Virol, Ltd.; West Surrey Central Dairy Co.; Wright, Layman & Unmey, Ltd. Layman & Unmey, Ltd.

Contracts

The following tenders have been accepted by the bodies named :-

Blean Guardians.—The British Drug Houses, Ltd., drugs; B. Pratt & Co., dressings.

Cranbrook Guardians .- Mr. G. H. Moorhouse, chemist and druggist, Hawkhurst, medical appliances.

Isle of Wight Guardians .- A. Millidge & Son, chemists, Newport, druggists' sundries.

Luneside Hospital, Lancaster.—Bate & Gorst, chemists, drugs.

Malling Rural Council.-Mr. H. C. H. Oliver, chemist and druggist, disinfectants.

Romsey Guardians.-Mr. F. Oram, Ph.C., dressings.

Birmingham

A pair of hair-brushes, presented by a local pharmacist as a prize at a whist-drive, were won by a baldheaded player.

The Christmas window-displays in local pharmacies are chiefly devoted to perfumes, soaps, and toilet articles. Shops will, generally speaking, be closed from Saturday evening, December 23, to Wednesday morning, December 27.

The death occurred on Decciber 14 of Mr. E. Jones, L.R.C.P., Aldridge, aged forty-five. Dr. Jones was the son of the late Mr. H. W.-Jones, F.C.S., who was at one time with Southall Brothers & Barclay, Ltd., Birmingham, and afterwards with Wyleys, Ltd., Coventry.

At Birmingham Police Court, on December 15, Harry Key, described as a chemist, and Harry Burton, described as a manager, were remanded on a charge of being concerned in attempting to supply a poison, knowing it to be intended for an unlawful purpose. Mr. Willison, who appeared for the defence, complained that he had not been informed of the nature of the charges that had been hanging over his client for the past three weeks. An analysis of the alleged poison, he added, had

not been received nor had the Registrar of Joint Stock Companies troubled to reply to communications addressed Both the defendants were remanded until December 28, bail being allowed.

Liverpool

The Chemist & Druggist Diary, 1923, is being described by the trade as in each section a record and more than ever indispensable.

The ease of consolidating the Christmas holiday is being taken advantage of even by the newspapers, which will enjoy an unprecedented vacation. One office (the "Daily Post and Mercury" and "Echo") has given the whole staff double wage packets for the week.

At the annual dinner of the district branch of the United Kingdom Commercial Travellers' Association, held in Liverpool on December 16, it was announced that £740 had been collected in aid of the Association's benefits the May W. H. Schaders F. C. S. debisiness and the collection of the Association's benefit of the Association's bene volent funds. Mr. W. H. Saunders, F.C.S., chairman of Ayrton, Saunders & Co., Ltd., gave the toast of "The City and Port of Liverpool."

Liverpool pharmacists, with few exceptions, are sharing honours with the largest emporia in the artistic merit of the Christmastide window- and counter-displays. A judge would find it difficult to award a prize. Mr. John H. Robinson has adopted floral decorations associated with perfumery, which he shows in much variety. Mr. W. E. Flenley, Great Crosby, devotes a window to Margerison's perfumery.

A Government order placed in Birkenhead for a battle-ship has increased the hopes of better trade on Mersey-side. The chairman of the Mersey Docks and Harbour Board stated, on December 14, that the trade of the port, as reflected in their accounts for the year ended July 1, showed a marked improvement over that of the previous year. The prospects for the current year were distinctly encouraging-the revenue was expanding satisfactorily in spite of the great reductions in their charges.

Manchester

On December 13 Councillor F. W. Batcs, J.P., Brooks's Bar, formally opened the Stretford Girls' High School.

The "Daily Mail" of December 20 quotes Sir William Milligan as relating, in the course of a lecture in the city, the dispersal of radium worth £1,500 by the breaking of a retort at the Manchester Radium Institute. A boy had the presence of mind to mop up some of the spilt contents with blotting paper, and further receives spilt contents with blotting paper, and further measures taken resulted in the eventual recovery of rather more than half the original quantity.

Nottingham

Prices of chemicals are still extraordinarily high compared with pre-war prices, states Professor Kipping, in refuting a suggestion that University College is in the habit of buying direct from Germany. If one can get something at, say, a quarter of the price from Germany, the Professor suggests that one needs to be very patriotic to buy in England.

The gifts of Sir Jesse Boot, Bt., to Nottingham University College total £170,000, of which £150,000 is to be applied to the building fund and the remainder to the endowment of a chair of chemistry. At the request of the Ministry of Agriculture and Fisheries, the biological and chemical departments of the College are undertaking an investigation of the water of the Trent.

Sheffield

Mr. Meadows, superintendent of the North-East Midland pricing bureau, has been on the sick list for several weeks.

Christmas window-displays are above the average of former years, and, though the amounts expended are small, business is proving better than was anticipated.

It is hoped that, as the result of a Ministry of Health inquiry into poor-law administration arising out of the abnormal unemployment, something will be done to relieve the rates, which, in the case of many chemists, amount to as much as the rent.

Miscellaneous

FLOORS COLLAPSE.—The top floor of a building occupied by F. Newbery & Sons, Ltd., druggists' sundriesmen, London, E.C., collapsed on December 14, several heavy cases falling on to the next floor, part of which also gave way. Except for a few minor injuries, no one was hurt.

The wrong packet.—Publicity has been given in the daily Press to the sending out of 1/21b. of coloured arsenic from the shop of Mr. A. Nicholson, chemist and druggist, Chertsey, to the wrong customer. The packet was lying near one containing saltpetre, which the customer in question had ordered. On discovering the mistake Mr. Nicholson informed the police, with the result that the arsenic was recovered from a farm three miles away.

SHOPPING FESTIVALS.—During a recent "shopping week" at Southend-on-Sea, Mr. G. Bruce, chemist and druggist, was awarded the prize in a window-dressing competition for the best display of the preparations of A. & F. Pears, I.td.—A shopping festival, organised by the South Shore Traders' Association, Blackpool, of which Mr. D. J. Bailey, chemist and druggist, is Presi-dent, was inaugurated on December 16. Over 500 free gifts have been placed at the disposal of the organisers by the traders.

VISIT TO CIGARETTE WORKS .- Portsmouth pharmacists and their wives forming a party of about sixty visited the local factory of the St. Petersburg Cigarette Co., Ltd., on December 13. The raw material, the intricate machinery, and the neatly finished article, as well as the extensive box-making, embossing and show-card manufacturing plant were viewed with interest. Mr. A. B. Sparrow, President of the Association, afterwards tendered the thanks of the visitors, and each lady was presented with a souvenir box of the company's product.

OPTICAL INSTRUMENTS ORDER BARRED.—The Report of the Committee appointed under the chairmanship of Sir R. Henry Rew to inquire into the complaint under the Safeguarding of Industries Act respecting optical elements and optical and other scientific instruments manufactured in Germany is not to the effect that the conditions laid down in Section 2 (1) of the Act are fulfilled, except in regard to metal spectacle frames and eyeglass mountings and mathematical drawing instruments. The Board of Trade, after considering the Report, have decided to make no order under Part II. of the Act arising out of the complaint in question.

CHARGE OF UTTERING COUNTERFEIT COIN.—At Kingstonon-Thames, on December 20, Thomas W. Chatterley, book-maker's clerk, was charged with uttering a counterfeit half-crown. Mr. Alfred Higgs, J.P., chemist and druggist, stated in evidence that about 8.45 p.m. the accused entered his shop and asked for a cake of soap. He offered in payment what appeared to be a half-crown, but being suspicious about the genuineness of the coin the witness weighed it and found it was one drachm flort. He then tested it further. When told that he would have to satisfy the police, the prisoner rushed towards the door and struggled violently when the witness stopped him. With the assistance of his son, the witness over-powered the prisoner. Chatterley was remanded in

A CORONER ON DEATH CERTIFICATES.—In the course of an inquest held at Wandsworth, on December 15, the an industrial and wanted on the action of a doctor in signing a death certificate when, it was alleged, he had not seen the deceased person for ten days. "Doctors," said Mr. Oddie, "ought to be very careful about signing these solemn documents. can a doctor say what is the cause of death when he has not seen the deceased person for about ten days? I always find that these guesses at the cause of death made by medical men are wrong, as in this case, which, of course, ought to have been reported to me at once. In this case the certificate was sent to me by a medical man, stating that the cause of death was cerebral hemorrhage or apoplexy, which was entirely wrong, and was purely guesswork on the part of the doctor.'

Scottish News

Presentation to Ex-Provost Raffan

Ex-Provost J. Raffan, J.P., chemist and druggist, Stirling, was presented, on December 13, with his portrait in oils, in recognition of his services to the community. Mrs. Raffan was the recipient of a gold wristlet watch. Mr. Raffan, a Banffshire man, commenced business in Stirling in 1882, and for seventeen years has been a member of the Town Council, for three years of which, 1917-20, he was Provost of the burgh. Replying to the presentation, he referred to the work of the Public Health and the presentation of the Public Council to the presentation. Health and the Building Committees, of both of which he had been the convener. The portrait, a three-quarter-length one by Mr. Cowan Dobson, R.B.A., showing the ex-Provost in his scarlet and ermine robes, is to be exhibited in the McLellan Galleries, Glasgow, in February at an exhibition of the artist's paintings, and will afterwards find a permanent home in the Smith Institute, Stirling.

Brevities

A committee has been appointed by Kirkcaldy Insurance Committee to make arrangements for a number of public lectures on venereal diseases.

In the course of a lecture to the members of Aberdeen Medical Society, recently, Dr. W. Fergusson, Banff, advocated the prescribing of elegant mixtures, and not horrid, ugly, inky-looking bottles of stuff. In the case of children especially the medicine should be made as nalatable as possible palatable as possible.

Glasgow

At Glasgow Sheriff Court, on December 15, Hugh Adam, grocer, Rutherglen, was fined £1 for selling a tin of peas containing 0.73 gr. of copper per lb., being equal to 2.87 gr. of copper sulphate per lb.

The fourth annual staff dance of James Taylor (Trongate), Ltd., manufacturing chemists, was held on December 12 at the Charing Cross Halls, Sauchiehall Street. The company, which numbered about 100, spent a most enjoyable evening. occasions, was M.C. Mr. Thomson, as on previous

The death occurred in Glasgow, recently, of Mr. C. R. Cowie, formerly of Rangoon, aged seventy-three. He was the discoverer of a process (C. & D., 1918, p. 735) of utilising the husk of rice, hitherto a waste substance, as fuel, instead of coal or wood, a factor which helped considerably to cheapen the cost of rice production. Mr. Cowie left Burma in 1891, retiring to Scotland.

Trade-marks Applied for

The figures in parentheses refer to the classes in which the marks are grouped, for a list of which, with particulars as to registration, see "The Chemist and Druggist Diary," 1922, p. 277.

(From "The Trade-marks Journal," November 29, 1922.)

"Rejuval"; for medicinal chemicals (3). By Savory & Moore, Ltd., 143 New Bond Street, London, W.1. 430,402.

430,402.

"Isovac": for vacuum flasks (15). By L. Rees, 12 New Union Street, London, E.C.2. 429,753.

"Sosol": for food substances (42). By De Bruyn, Ltd., Central Buildings, Blackfriars, London, E.C.4. 426,590.

"REGINA TOLET SOAP" on label device; for perfumed soap (43). "REGINA": for goods (47), and for perfumery, etc. (43). By Price's Patent Candle Co., Ltd., Battersea, London, S.W.11. 426,701/702/703. (Associated.)

"BITTEER," "TAPIR," and "CASSOWARY," under pictures of same; for goods (47), and for perfumery, etc. (48). "Weight," under picture of same; for perfumery, etc. (48). By Ogston & Tennant, Ltd., Wright Street, Renfrew. 429,610/611/614/615/620/621/613. (Associated.)

"Handy Grip"; for shaving soap (48). By Colgate & Co., 199 Fulton Street, Manhattan, New York, U.S.A. B. 421,967.

B. 421,967.

"RARA FOR THE HAIR" on label device; for hair preparations (48). By Alice E. T. Ward and Eric T. Ward, Albion House, Hatchet Lane, Winkfield, Windsor. B. 426,212.

"STACOME": for pomades for the hair (43). By Standard Laboratories Inc., 748-750 Stanford Avenue, Los Angelos, California, U.S.A. 429,335.

Poisonings

THE following cases of fatal poisoning, among others, have been recorded since our last report :-

An inquest was held on December 15 at Halton, Lancashire, on the body of Stanley Hopps, a veterinary surgeon's assistant, who was found dead in a wood. Medical evidence pointed to hydrocyanic acid having been taken by the deceased while in a state of epileptic automatism, and a verdict was returned correspondingly. It was stated that two empty bottles which had contained the acid were found close to the body.

A verdict of "Suicide while of unsound mind," was returned at an inquest held in Central London, on December 18, on the body of Mr. Paul Adolphus Harbord, December 18, on the body of Mr. Faul Adolphus Harbord, a commercial traveller, seventy years of age, who, the evidence showed, took potassium cyanide and walked into a police station, where he collapsed. In a letter addressed to the coroner Mr. Harbord wrote:—"The poison that has helped me has been long in my possession; it was easily obtainable by me, as I have been engaged in the chemical trade for many years."

The West London coroner inquired, on December 15, into the death of Mr. Henry Lazarus, author, Roland Mansions, South Kensington. The widow, giving evidence, stated that for several years her husband had taken trional, sulphonal and veronal alternately. Another witness having related the circumstances of the death, Dr. E. Stolkind, a Russian, said he knew that Mr. Lazarus had taken veronal and medinal, and learned on December 11 that he wrote his own prescription for medinal, which was sodium veronal. The witness was shown a prescription in the handwriting of the deceased for 1 oz. of medinal, and he said the amount was absolutely wrong. The Coroner: Would it be right for a chemist if he saw a prescription like that to sell that quantity?—I would make inquiries from the doctor. Dr. C. T. Parsons, who had made a post-mortem examine. C. T. Parsons, who had made a post-mortem examination, attributed death to narcotic poisoning. Mr. Arthur Edward Barrett, assistant at Parke's Drug Stores, Ltd., Fulham Road, S.W., said the bottle produced was supplied by his firm, and contained 1 oz. of medinal. It was sold on production of a doctor's prescription in the regular order. The Coroner: The bottle contains 1 oz. It is not customary for medical men to order 1 oz, of this sort, is it?—No, sir. The witness added that the patient had brought a prescription for medinal about three days before. The coroner pointed out that the prescription bore no address or telephone number, and asked if it was not rather dangerous to supply a drug without making an inquiry. Witness: The fact that he had produced a prescription for medinal before showed me that he knew exactly what he was taking. Witness said he had done all that was required under the Pharmacy Acts. The Coroner: If you do not verify the signature, what is there to guard against forgery or mistake?—I am afraid there is nothing. The deceased man's daughter said there is nothing. The deceased man's daughter said her father had told her that he signed the prescription with a contraction of a Hebrew name which was not a doctor's name. Her father got the original prescription many years ago. The coroner, in summing up, pointed out that the bottle of medinal with regard to which the chemists' assistant had given evidence had no bearing on the death, because it had not been opened. The verdict given by the jury was to the effect that an overdose of medinal had been taken by misadventure.

Other cases include an accidental death by potassium cyanide and suicides by means respectively of oxalic acid, lysol, and spirit of salt.

IMPORTATION OF LIVING PLANTS. -An Order issued from the Ministry of Agriculture and Fisheries states that for the prevention of the introduction of the Colorado beetle the landing in England or Wales of any living plants or vegetables shipped from any port in European France is prohibited unless the landing thereof is authorised by a licence issued by an inspector of the Ministry or the plants or vegetables are accompanied by a declaration purporting to be made by the grower or exporter.

Business Changes

Mr. W. Flack, chemist and druggist, has taken over the business of Mr. R. E. Armstrong, 20 Vivian Road, Wellingborough.

Mr. George G. Willey, manufacturing chemist, Blackburn, has removed from 2 Union Street to 7 Boltons Court (off Richmond Terrace).

G. MORAITIS & Co., merchants, late Rue Franque, Smyrna (where their premises were completely destroyed in the recent fire), have opened at 18 Rue Cherif Pacha, Alexandria.

Mr. E. Robinson, chemist and druggist, has opened a business at 295 Highfield Road, Hall Green. Mr. Robinson, and Robinson at 295 Highfield Road, Hall Green. son was for eight years with Southall Bros. & Barclay, Ltd., Birmingham, and during the war served in France as a sergeant dispenser.

Boots, Ltd., have completed the fitting-up of the pharmacy at Waterloo Station, the London terminus of the London & South-Western Railway (C. & D., November 4, p. 621), and it is now open to the public. An illustration of the premises appears in the "Railway Gazette " of December 15.

W. EDWARDS & Sons, druggists' sundriesmen, announce that their business at Queen Victoria Street, London, E.C., will be closed on Thursday evening, December 21, and re-opened at 14-18 Nile Street, City Road, N.1, on Friday, December 29 (C. & D., November 18, p. 685). Telephone: Clerkenwell 5230, 1, 2.

Gazette

Partnerships Dissolved

Benson, Mary, and Harwood, J. O., Ambleside, Westmorland, chemists, under the style of Thomas Bell.

Cohen, R. R., and Rousso, S. H., 2, Talbot Court, East-cheap, London, E.C.3, chemical and general merchants, under the style of Cohen & Rousso.

Christmas Greetings

The following business houses are wishing their astomers and friends the season's greetings through customers and advertisements in this issue:

Allen & Hanburys, Ltd. Allen, Stafford, & Sons,

Ltd. Ayrton, Saunders & Co.,

Ltd. Berton, Arthur, Ltd.

Bromage, Gerald, & Co., Ltd.

Burgoyne, Burbidges & Co., Ltd.

Christy, Thos., & Co. Eastern, The, and Russian Trading Co., Ltd.

Eno, J. C., Ltd.

Essences and Synthetics, Ltd.

Evans Sons Lescher & Webb, Ltd. Ford, T. H., Ltd.

Glaxo.

Greeff, R. W., & Co., Ltd.

Harker, C. R., Stagg & Morgan, Ltd. Harley, Thomas Harrington Bros., Ltd. Hough, Hoseason & Co., Ltd. Kerfoot, Thomas & Co., Ltd. London College of Pharmacy Owbridge, W. T., Ltd. Pears, A. & F., Ltd. Potter & Clarke, Ltd. Sangers Scurr, C. A. Smith, T. & H., Ltd. Stearns, Ltd. Waide, Thomas, & Sons, Ltd. Westminster College Pharmacy

Whitaker & Co.

DIARY CORRECTIONS.—We shall be glad if subscribers will please make the following corrections in the Trade Directory section of The Chemist and Druggist Diary,

Eno, J. C., Ltd.: Address should be Lever House, Victoria Embankment, London, E.C.4. Goodall, Backhouse & Co.: Telephone number should be

20435 (three lines).

Hall, Forster & Co., Ltd.: Address should be Peel Buildings, Temple Street, Newcastle-on-Tyne.
Robinson & Sons, Ltd.: London telephone number should be "Clerkenwell 3684."

French News

(From the "C. & D." Paris Correspondent.)

FRENCH EXPORTS TO COLOMBIA.—As an exporter of pharmaceuticals to Colombia (South America), France is next in importance to the United States, whose consignments have largely increased since 1917. The imports from France have decreased in total weight, but doubled in value, possibly on account of their increased costs. The Spanish proprietaries were popular during the war, but being mostly more or less successful imitations of French goods, have now lost ground considerably. The Italian ampoules are, however, making progress on what was once a purely French market.

A SERIES of very serious explosions of stoves and heating apparatus is at present engaging the attention of the Paris Press and public. Whether these are due to the accumulation of gas in the upper part of closed stoves, or to explosives placed with malicious intent among the fuel, is uncertain. One such explosion occurred at Pierre Dhumez & Co.'s perfume factory at Vallauris, on the Riviera. The boiler used for distillation had just been stoked when the furnace exploded, shaking the walls and roof of the building. In this case a four-inch brass tube is said to have been found among the coal.

How to aid students of the Faculties who are suffering from the increase in the cost of living is being raised by a Parisian daily paper. M. Radais, the Dean of the Paris Faculty of Pharmacy, was interviewed on the subject. He favours the idea of the "debt of honour," i.e., of money advanced to the student on the condition that he shall repay how and when he can. "The losses resulting from excusable failures would be largely recompensed by the 'extras' paid into the fund by those borrowers who would wish to add an expression of their gratitude to the payment of their debt." It is gratifying to learn that the new Dean has a high opinion of the honour and appreciation of the pharmacy students.

An interesting decision.—For a baby of three months suffering from acute pneumonia, a Parisian doctor prescribed a calming mixture and an external application. The prescription was correctly dispensed, but labelled wrongly. The child took two spoonfuls of the external preparation and died soon after. The parents sued the pharmacist and his assistant for 15,000f. damages, and after a long delay (caused by the war) a Parisian court condemned them jointly to pay 5,000f. They appealed, and the decision of the lower court was recently quashed, the Court of Appeal holding that, after taking expert evidence, "it does not seem to be proved that the absorption of the liquid played the smallest part in the causes of death." (The necessity of proving correlation between a dispensing error and a disease is the interesting point of this decision.)

The Berthollet centenary celebrations at Annecy were marred by bad weather; the ceremony had to be held inside the Town Hall. The celebrated chemist was a native of Talloires, a village near the well-known Lake of Annecy, but spent most of his life at Paris, where he died on November 6, 1822. M. Long, the local Professor of Chemistry, traced the savant's career—how he drifted from medicine to chemical studies, became Lavoisier's chief opponent in the "phlogistic" discussion, but finally his convert; applied chlorine to bleaching purposes with great success, and narrowly escaped death in an experiment with potassium chlorate while chief of the Saltpetre Committee of Revolutionary France. He passed unscathed through the Reign of Terror, to which Lavoisier fell a victim, and as one of Bonaparte's early friends, became a Senator and Count of the Empire. His works on chemical statics and on the doctrines of chemical affinity are perhaps the most remarkable of his writings. His statue is one of the few monuments of Annecy.

PARIS SOCIETY OF PHARMACY.—At the November meeting M. Guerbet presented M. Bouillot's apparatus for the rapid drying of delicate organic compounds without change of colour. M. P.

Fleury showed M. Guillaumin's "comparative chromoscope" for the colorimetric determination of positive ions in liquids, and Professor Goris M. Génat's cachetmaking machine. M. Lesure reported a case of poisoning by eggs. Bacteriological examination revealed B. coli and enterococci, but the nature of the toxic compound could not be definitely settled. M. Lesure mentioned two cases of intestinal calculi; in one case the patient had taken a barium preparation intended for x-ray examination. M. Herissey gave a description of how he had synthesised by bio-chemical means methyl-d-mannoside directly from the mananes which are found in large quantities in the albumen of certain leguminous seeds. This method of synthesis, commencing not from the sugars, but from their products of condensation, might, he thought, be largely extended. M. Perrot communicated M. Massy's researches on liquid tar ("goudron"). The oils obtained from the wood of Juniperus oxycedrus and Cedrus atlantica (the cedar of the Atlas mountains) show a decidedly different rotatory power (-31.4 for the former, +41° to +45° for the latter). This would suffice to reveal adulteration. M. Fabre described his tests of thyroid gland powder. Bernier and Peron's method permitted precise dosage of iodide; the results concurred with those of Kendall's system or the U.S.A. Pharmacopæia test. Adulteration by addition of iodine products can thus be detected. Referring to the report of the Ninth Sub-Committee on Codex Revision, M. Lantenois asked that the question of the quantity of water in extracts should be reconsidered. M. Herissey opposed the elimination of soft extracts ("extraits mous"). M. Michel suggested a formula for compound syrup of bromoform.

SOCIETY OF THE HISTORY OF PHARMACY.—A special meeting was held recently, at the Palais d'Orsay, in honour of Dr. Paul Dorveaux, permanent secretary, who has retired from his post as Librarian of the Paris Faculty of Pharmacy after 38 years of service. The Society had issued special invitations, and about 120 wellknown Parisian pharmacists were present. The chair was taken by Professor Radais, Dean of the Paris Faculty of Pharmacy. M. Barthelemey expressed the regret of the employees of the Library at M. Dorveaux's departure.
M. Guitard, of the S.H.P., dwelt on M. Dorveaux's contributions to pharmaceutical literature, 245 works, "solid and reliable as the writer himself," on biography, old pharmacopæias and publications, medicine and bibliography. He regretted that the University had not thought fit to establish a Chair of the History of Pharmacopæias and publications of the History of Pharmacopæias and publications of the History of Pharmacopæias and publish a Chair of the History of Pharmacopæias and publish and published by the State had not received M. Dorvensky. thought ht to establish a Chair of the History of Pharmacy, or that the State had not recognised M. Dorveaux's work by any "decoration." MM. Delaunay--Dumas and Fosseyeaux spoke on behalf of the Society of the History of Medicine, and Dr. Henri Leclerc voiced the gratitude of the "Readers of the Library." M. Tricot-Royer, who had taken the night express from Antwerp in order to be present, acknowledged the indebtedness of foreigners to the courteous and erudite librarian. Professor Thomas, of the Faculty of Literature, referred to M. Dorveaux's philological knowledge, his notes on Rabelais, etc. M. Ch. Buchet, President of the S.H.P., Professor Guignard, member of the Institute, added eloquent tributes, and finally M. Radais dwelt at length on the Librarian's work at the School and Femily. at the School and Faculty. Dr. Dorveaux briefly replied. He had been "covered with flowers," medicinal and rhetorical, by his friends, whose appreciation was more acceptable to him than any honours to which some speakers had alluded. He paid tribute to all who had aided him had alluded. He paid tribute to all who had aided him in his work, and to the collaboration he had received from the authorities of the Faculty. His only merit had been to believe that libraries existed for the sake of readers, and that a librarian should always put himself at their disposal. Besides the speakers mentioned, the guests included ex-Senator Cazeneuve, M. Collard, secretary of the French Pharmacists' General Association, M. Vaudin, the 1923 President of the Paris Society of Pharmacy, Professor Grimbert, of the Paris Faculty of Pharmacy, Professor Grimbert, bead hospital pharmacists. MM Professor Crimbert, of the Paris Faculty of Pharmacy, Dr. Viron, and other head hospital pharmacists, MM. Fialon, Balland, and numerous members of the S.H.P., and a certain number of members of Dr. Dorveaux's family, including Professor Délépine (his son-in-law), Madame Délépine, and her two daughters, who, with a few other ladies, graced this pleasant. Paunion.

American Notes

BY "THE MAN FROM LONDON"

SALE OF VERONAL PROHIBITED.—Suicides have become so frequent in New York that the Health Department has forbidden the sale of veronal, luminal, trional and salts except upon the written prescription of a duly licensed

NOVEL CHRISTMAS BOX .- Many firms make it their policy to give bonuses to their clerks around Christmas-time. During November and December some druggists pay their salespeople from one-half to 1 per cent. on sales. One firm has entered a contract with an insurance firm to carry a life insurance for the benefit of each employee coming within this schedule. This form of life insurance is of more permanent nature than former Christmas remembrances. A ballot was held as to whether this would be acceptable, and 73.8 per cent. were in favour.

A CAUTION ABOUT ASPIRIN.—Speculators have made a practice of buying up offerings of the Surplus Property Section of the War Department. The last week in October 61,518 bottles of aspirin were sold by auction in New York, and it is claimed this drug has been going backwards and forwards during the past few years between this country and France, and it is very questionable if it is of any use whatever. The manufacturers of legitimate aspirin do not like the idea of these sales by the War Department, and the Bureau of Chemistry of the U.S. Department may most likely be compelled to look into this matter as early as possible in the interests of the public.

SERVICE IN PUSHING SALES .- Every branch of trade, from the manufacturer down to the retailer, is building successfully by featuring, not so much the goods they have to sell as the service they have to render. For instance, the paint and varnish industry, with an output of more than \$400,000,000 a year, has ceased practically to try and sell paint and varnish. The industry as a whole does not say, "Buy more paint"; it does say, "Save your property," so the idea is driven home that paint and varnish is the industry of preservation, and the slogan is, "Save the surface and you save all." This idea of making service the keynote in pushing sales might be applied generally to the drug-store.

ACIDS MANUFACTURE DECREASE.—Official reports show a considerable decrease in the number of establishments engaged in making sulphuric acid, nitric acid, and mixed acid during the year 1921 as compared with 1919. The total value of products reported for 1921 amounted to \$20,529,000, and for 1919 to \$31,470,000, a decrease of 34.8 per cent. Of the thirty-five establishments reported in 1921, five were located in New Jersey, five in Pennsylvania, four in Ohio, three each in California and New York, two each in Maryland and Virginia, and one each in Alabama, Arkansas, Colorado, Connecticut, Illinois, Kansas, Massachusetts, South Carolina, Tennessee, Texas and Utali. New Jersey produced 27 per cent. of products in 1921.

NARCOTIC LAW NO GOOD ?- The Narcotic law has not given satisfaction as regards restraining the clandestine distribution of habit-forming drugs, nor their use by addicts. The illicit distributor is not caught because he never goes inside of the net. He does not have to bother about official order blanks, or keep records; neither does he bring in his "coke" or "dope" through the Custom house, or report his transactions to Government officials. The very complex nature of the regulation laws breaks them down, as, in the effort to close up illegal outlets, the energies of the enforcing officers are absorbed in auditing, recording, checking and rechecking transactions with which the law should not concern itself, and in the meantime the real criminals get away and prosper hugely in their nefarious trade.

SALARY EXPENSES .- According to statistics compiled by the Harvard Bureau of Business Research, the average pharmacist pays 10.95 per cent. of his total receipts for clerk hire, his total overhead expense being 25.65 per eent. of his total sales, as follows: Rent, 4.02 per cent., salaries 10.95 per cent., advertising 2.76 per cent., heat and light 0.69 per cent., delivery 0.51 per cent., supplies

0.36 per cent., insurance and taxes 1.21 per cent., general expenses 4.49 per cent., depreciation and shrinkage 0.47 per cent., bad debts 0.19 per cent. Percentage of total expenses to sales 25.65 per cent. By these figures nearly 11 cents of every dollar taken in over the counter is required to pay the salaries of the sales force, so with this aid to calculate by, the retailer may ascertain if the salaries he is paying are above or below the average for his line of business.

John Barleycorn, M.D.—At a recent meeting of the Kentucky Board of Pharmacy it was stated by Edward Bloomfield, attorney for the Board, that "drug stores" which did not actually have a pair of prescription scales and not \$300 worth of regular pharmaceuticals had nevertheless filled 2,400 "prescriptions" for whisky at \$3 a pint and used over 50 gallons of alcohol "for technical purposes" during the past twelve months had been seen in the course of an investigation. A favourite evasion of in the course of an investigation. A favourite evasion of the law consisted of filling prescriptions for 1 dram of tincture of nux vomica and 1 dram of tincture of valerian in a pint of whisky. In one store alone 7,500 such scripts had been filled. This state of affairs has resulted in unreasonable rules and regulations being made, which have driven many legitimate druggists to refuse to handle alcohol at all. There seems to be reasonable doubts if the doctors are correct in all their diagnoses of so many patients suffering from "dryitis" in Kentucky, which have produced a corresponding wetness in some drug stores to remedy the complaint.

VALUE OF COD-LIVER OIL.—Experiments on human subjects to determine the digestibility of cod-liver oil show that, in thoroughness of digestion, cod-liver oil agrees closely with the majority of fats and oils that have a melting point at or below body temperature. Bulletin No. 1033 ing point at or below body temperature. Bulletin No. 1000 of the U.S. Department of Agriculture reports: The food eaten per man, per day, provided on an average 16 gm. of protein, 47 gm. of fat, and 310 gm. of carbohydrates, and its fuel value averaged 1,740 calories. The maximum amount of cod-liver oil consumed by any subject was 53 gm. per day. The coefficient of digestibility was high in the average forms 97.7 per cour indicators. every case, and the average figure 97.7 per cent indicates a very complete utilisation. Except that the subjects were somewhat constipated, no physiological disturbances were noticed. The report describes investigations as to the digestibility of other oils, mainly vegetable, such as Javaalmond oil, tea-seed oil, watermelon-seed oil, also deer fat, blended hydrogenated fats, etc., with the result that, in digestibility and completeness of utilisation, cod-liver oil was found to stand first. Next to it comes Java-almond oil, the digestibility of which is 97.0 per cent. Corn fats were utilised in the degree of 95.2 to 91.5 per cent.

QUICK TURNOVER IMPORTANT.—Rate of stock turnover is one of the most important factors in successful retailing. The retailer should select his stock, with certain definite views as to how quickly he is going to turn that merchandise over after he has bought it. The word "turnover" means the number of times in a year that a certain stock of goods is sold and replaced. It cannot be computed on either the basis of cost or retail values. If a store carries an average stock of merchandise large enough for four months' sales, then the rate dise large enough for four months' sales, then the rate of turnover will be three times for that year. There is need of adopting a weekly or monthly inventory system to correct errors in buying, as annual turnover figures are worth little, as they are taken when the stocks are low, and consequently do not represent average or normal conditions. The fixed operating charges of a store are the same whether the merchant sells \$1,000,000 or \$1,200,000, the only difference there might be occurring in the direct selling salaries. Even here the be occurring in the direct selling salaries. Even here the percentage to sales would be less in proportion to the larger volume. The studies made by the Harvard School of Business Research for 1921 show the total expenses of Business Research for 1921 show the total expenses to sales to be 27.9 per cent. In other words, this merchant would have a clear gain of 27.9 per cent. of \$200,000 by increasing the rate of turnover only one-fifth. It is the quick turnover that enables the merchant in the large city not only to compete with, but very frequently to undersell the stores in the smaller communities, which is the more remarkable when it is conmunities, which is the more remarkable when it is considered that rents are many times higher in a large eity than in the smaller towns.

Legal Reports

Inaccurate Dispensing.—At Mansion House Police Ccurt, London, on December 18, William Lloyd Evans, chemist and druggist. 39 New Bridge Street, E.C.4, was summoned, under the Sale of Food and Drugs Act, for unlawfully selling a compound drug, a prescription of the London Insurance Pharmacopæia, deficient in sodium salicylate to the extent of 19 per cent. and in potassium bicarbonate to the extent of 25 per cent. There was a plea of "Guilty." Mr. T. G. Vickery, assistant City solicitor, who appeared for the prosecution, called as a witness Dr. Howarth, medical officer of health for the City. Dr. Howarth said that unless a doctor's prescription was rigidly adhered to he would be all at sea in dealing with a patient. He (witness) did not lay great emphasis on the deficiencies in the present case. Mr. Vickery said there was no previous complaint, but this prosecution was to emphasise that panel patients required as much care as anyone else. Mr. Kirby, defending, said that it was a pure inadvertence on the part of the dispenser, in connection with which there would be no more profit than a fraction of a penny. The magistrate inflicted a fine of £5°, with £1 ls. costs.

Arsenic an Adulterant in Cocoa.—At Richmond (Surrey) Police Court, on December 18, the Home and Colonial Stores, Ltd., were summoned, under Section 6 of the Sale of Food and Drugs Act, 1875, for having sold at Sate of Food and Drugs Act, 1878, for naving soid at a local branch cocoa adulterated with arsenious oxide to the extent of $\frac{1}{40}$ gr. per lb., and Rowntree & Co., Ltd., York, were summoned for aiding and abetting. The facts of the case were not disputed. It was stated for the prosecution that the cocoa purchased at the shop in question was a blend of seven cocoas, and that, on samples of these being separately analysed, that obtained from Messrs. Rowntree was found to contain $\frac{1}{10}$ gr. of arsenious oxide per lb. The principal witness called for the Surrey County Council was Mr. Edward Hinks, B.Sc., F.I.C., its public analyst, who, cross-examined by Mr. Travers Humphreys, counsel for Messrs. Rowntree, agreed that if a man consumed as much as five cups a day of this particular cocoa he would have taken a day of this particular cocoa he would have taken into his system only $\frac{1}{200}$ gr. of arsenic. Mr. Humphreys: Do you suggest anybody is in the least likely to be injured in health by the use of this cocoa containing $\frac{1}{10}$ gr. per lb.?—I think it is on the line where it might be harmful. Mr. Humphreys, after addressing the Bench, called Sir William Willcox, medical adviser to the Home Office, who said that this was the first instance he had heard where arsenic had got into food through potassium carbonate. Mr. Humphreys: Supposing a person took five cups of cocoa a day, which would mean that he took $\frac{1}{200}$ gr., would that be injurious to health?—No, it is so very small that I do not think it would be. Mr. Basil Gordon MacLaren, now chief it would be. Mr. Basil Gordon MacLaren, now chief chemist for Messrs. Rowntree, said he had never suspected the presence of arsenic in carbonate of potash. A Magistrate: Did you know of any deterioration of the carbonate of potash in 1922?—No. I knew that a certain amount of potash had been made by a new process of extracting it from blast-furnace gases, but not in the country where we got our potash from—Germany. Mr. Arnold Rowntree, in the witness-box, Germany. Mr. Arnold Rowntree, in the witness-box, said that the stock sacrificed amounted to about 300 tons, varying in value from £100 to £250 a ton. Mr. Ricketts, on behalf of the Home and Colonial Stores, said that they withdrew eighty-five tons, involving them in a loss of £12,000. The Bench, after retiring, imposed a fine of £2 against the Home and Colonial Stores, Ltd., and £20 against Rowntree & Co., Ltd., with £52 10s. costs.

Medicine Stamp Act Case.—At Mansion House Police Court, London, on December 19, William Bredt, 10, Fenchurch Avenue, E.C., was summoned at the instance of II.M. Customs and Excise for having vended packets containing certain preparations to be used and applied as medicines and medicaments for the prevention, cure and relief of disorders and complaints affecting the human body, namely Styptol and Bromural, without a paper

cover, wrapper and label duly stamped, as required under the Medicine Stamp Act. Mr. Trevor Watson appeared for the defence. Mr T. G. Gibson, prosccuting, said that both the articles in question came within the scope of the Act declare with statement and contained which of the Act dealing with patent medicines which the defendant was licensed to sell. Bromural was recommended as a balm for procuring healthy sleep and as a behalf of Allen and Hanburys, Ltd., and the goods should have had the proper wrapper and stamps, but had not. When the defendant was seen by a Customs officer he said he thought he need not put on stamps when he sold the preparations to a chemist for dispensing. When asked if he thought they were suitable for use in dispensing he replied, after hesitation, "I think not." He said he had no stamps for patent medicine purposes in his possession. In the course of further conversations, on being asked to produce his books showing sales, he admitted that the Customs had sustained a loss of between £240 and £250. The penalty for each of the three cases before the court was £10, and the Customs authorities asked for the infliction of full penalties. Mr. Ernest Charles Cripps, chemist and druggist, manager of the sales department of Messrs. Allen and Hanburys, proved purchasing the articles. Cross-examined: Both articles were well-known drugs of recognised chemical composition. Bromural was manufactured by his firm under another name. Both articles appeared in Martindale's "Extra Pharmacopæia." They were manufactured by a German firm for which defendant acted as agent in this country. The witness further said he did not think either drug was generally sold over the counter; they were usually prescribed by doctors. Mr. Watson: Both Styptol and Bromural might be used as ingredients in doctor's mixtures? The witness thought not. Charles William Baker, an officer in the Customs and Excise, deposed that he interviewed the defendant, who told him that he (Mr. Bredt) never stamped the firm's medicines, as they put a dispensing label on indicating that the medicines were sold for dispensing-purposes. They were supplied to wholesale houses, and if they sold them for any other purpose they should stamp them themselves. The defendant further said: "There has been no attempt to defraud the Revenue. I hope the authorities will appreciate that." Mr. Bredt also stated he only took over the business in October or November 1921. Cross-examined, the witness said that the defendant acted in the most frank manner, and made no attempt to put any obstacle in the way. Watson contended he had no case to answer. He agreed the Section in question of the Stamp Act was very difficult to construe, but Acts dealing with taxes must difficult to construe, but Acts dealing with taxes must be construed strictly. As to tbe pamphlets which had been put in, they were not issued to the public, but only to medical men, and all the Court had to deal with, therefore, was what was on the packets in which the articles were sold. No doubt these two articles might be properly described both as drugs and medicines, but he contended that foreign drugs, except medicines, were exempt under the Schedule in the Stamp Act and could words. He contended the articles were really drugs and not medicines. The Lord Mayor: I don't see how you make it a foreign drug and not a foreign medicine. Mr. Watson: All drugs are medicines, but all medicines are not drugs. Medicine the genus, drug the species. The Lord Mayor said his impression was that a drug was an Lord Mayor sand his impression was that a drug was an original production which, when mixed with other ingredients, became a medicine.

Webster defines the word "drug" as "an article used in compounding medicines." Mr. Watson repeated his contention. General descriptions could not do away with the fact that, by the Schedule he had referred to, these particular articles did not come within the scope of the Act. He admitted that in a case decided in the High Court it was held that drugs vended entire were subject to the stamp duty, but it was not proved that these particular drugs had been vended entire. Had the defendant been summoned for selling the drugs as foreign medicines he could not have resisted a conviction. Gibson applied for the summonses to be amended.

Litigation over "Milton"

An action was heard in the King's Bench Division, on AN action was neard in the King's Bench Division, on December 18, by Mr. Justice Branson, concerning the quality of the supplies of "Milton." The suit was brought by Mr. Frederick Algernon-Langley, trading as Langley, London, at High Street, Borough, against the Milton Manufacturing Co., Ltd., Bunhill Row, London, claiming damages for breach of agreement under which the plaintiff was to market defendants' disinfectant in South America, and damages for breach of warranty as to the quality of the disinfectant breach of warranty as to the quality of the disinfectant supplied, which included 205 cases of "Milton" and six cases of sprayers in April 1920, and twenty-five cases of cases of sprayers in April 1920, and twenty-five cases of "Milton" in October 1920. In the alternative plaintiff claimed for the return of £534 and £59 paid for the goods, and £1,500, moneys paid by plaintiff and for services rendered. The Milton Manufacturing Co., the plaintiff proceeded, undertook to sell him "Milton" at minimum export prices f.o.b. London, less 5 per cent. commission, for sale in Chili, Bolivia, Ecuador and Peru. He said further that the defendants were to supply sales He said further that the defendants were to supply sales advertising matter in Spanish. An agent was sent by plaintiff to prepare the market, and he in turn appointed agents in these states. Mr. Langley complained that the defendants did not send him advertising matter, and the goods were not of the quality, strength and description represented. They were wholly worthless, the "Milton" being so weak that it would not remove ink stains from paper or fabric or dissolve a small piece of sponge in twenty-four hours, and it was, in short, forty times weaker than "Milton" of normal strength. Plaintiff was liable to compensate his agents, and had himself lost profits. Mr. Mackaskie said "Milton" was usually put up in brown bottles, but that shipped for plaintiff was in green, and in hot countries the stronger light, he suggested might have a disintegrating effect on the contents. Defendants had said as much in regretting the use of green bottles. They had offered to replace these shipments at their own cost, but plaintiff asked for reimbursement, lost profits, and indemnification against claims. Mr. Robert George Grimwood, analytical chemist, of Henner & Grimwood, Billiter Square, said that he found the samples in green bottles had no effect on ink stains, while that in brown bottles had, and the former would not dissolve sponge in less than fortyeight hours, as that in brown bottles would. It was suggested that green glass was not non-actinic, though he did not think that mattered if the bottles were in cases. Of chlorine, the active ingredient in "Milton," he found only 0.012 per cent. in the green bottles, while the brown contained 1.08 per cent. (Press expansion) is the state of the brown contained 1.08 per cent. the brown contained 1.08 per cent. Cross-examined: He did not think that South American climate would affect the disinfectant. The actinic rays were not strongest in the tropics, but on the top of the Swiss mountains. There should not be deterioration in the contents if the bottles lay in lighters properly packed. Mr. George Henry Hayes, plaintiff's selling agent, said a representative of defendant told him that "Milton" as a germicide was seventy times stronger than the ordinary 5 per cent. solution of carbolic acid.

Counsel for defendants said their case was that there was no warranty, the contract was f.o.b. London and the disinfectant was good when shipped. Anything that happened afterwards had no legal relevance. Mr. Langley told the court that it had been represented to him that "Milton" was suitable for all climates. Mr. Grimwood, on December 19, when the case was resumed, was called back to the witness-box, and said he had just made another test by rinsing out one of the green bottles with "Milton" from an amber bottle and then filling the green bottle with "Milton" he had had by him for a twelvemonth after testing. When he tested it again a week ago it had lost none of its strength. After twenty-four hours in the green bottle, however, it had gone down 73 per cent. to 0.29 per cent. of available chlorine. He supposed that mineral salts in glass might affect the available chlorine. In "Milton" they had a slightly alkaline solution of sodium hypochlorite, with a very large quantity of salt.

Because of something in the glass the sodium hypochlorite was no longer sodium hypochlorite, but was there as chloride; the one went off as available chlorine, the other did not. He did not think the colour of the bottles had anything to do with it, but that their chemical composition had. He supposed the amber bottles had not the inimical salts. His lordship observed that a letter said the actinic effect of the glass was not in itself sufficient the actimic enect of the glass was not in itself sumcient to upset the stability, but it might help. Mr. Moresby explained that the company had sold over £20,000 worth of "Milton" in green bottles without a complaint, and every batch of bottles used was carefully tested by the chemist. The loss Mr. Grimwood found in twenty-four hours might be due to some other cause than the glass. Mr. David Macgregor Rogers, managing director of the defendant company for six years, said they had had no single case of a bottle returned, and they had sold a large quantity in green bottles. He impressed on the plaintiff that they knew nothing of the effect of tropical climate on "Milton." He thought Mr. Langley was going to test it with a trial and find a market. Dr. Arthur Thomas Masterman, chief consultant to defendants, said he had Its basis, sodium hydrochlorite, was unstable, and would decompose under heat. He found in Milton kept at 125 deg. F. for six months a reduction of hypochlorite by nine-tenths at least. In one case it went down from per cent. to 0.13 per cent. in five months ending March 1 per cent. to 0.13 per cent. in five months ending March 1921. That test was completed soon after the first complaint of plaintiff. Witness found no decomposition up to 90 per cent., and he saw evidence in the fluid that decomposition was not under the action of light. Neither was it from the constitution of the glass. When first they used green glass they pulverised it in a mortar and put the powder in distilled water on the one hand and in "Milton" on the other. There was no indication that any body went into solution in the distilled water, and no effect on the "Milton." The hearing was adjourned. adjourned.

JUDGMENT.

On December 20 his lordship found for plaintiff, He said plaintiff sued for breach of a verbal agreement of April 20, 1920, under which he was appointed for three years distributing agent. Plaintiff said it was represented to him that the fluid could be used for all the ordinary purposes of a disinfectant, and if there was such a representation it would include a statement that it would keep a reasonable time before use. Defendants said there was no verbal representation or warranty; they were unaware what would happen to the fluid in a hot country and could give no express warranty. His lordship accepted plaintiff's version, as he thought it unlikely that an agreement would be made to Mr. Rogers, who knew all about the business, by which the plaintiff took all the risks of importing into hot countries. It must have been made known that experiments had proved that the fluid, when kept in heat, lost its efficacy within five months. He found that a definite assurance was given to the plaintiff that the fluid would be reliable in the country into which it was intended to import it. If there was a warranty that the material would be reliable and stable it was not material to find out whether the failure of it was due to the way in which it was put up, to the character of the bottles, or to other causes. There had been breach of a contract. Plaintiff had paid money for advertising and to selling agents. His lordship gave plaintiff £250 for loss of profits, and awarded him a total of £1,630, and granted a stay of execution on the usual terms.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a recent meeting of the Comitia the registrar moved, for the scoond time, that by-law No. CXIV., relating to candidates for the membership, be repealed. The by-law reads as follows:—"No candidate shall be admitted to examination who is engaged in trade, or makes any arrangement with a chemist or any other person for the supply of medicines, or who practises medicine or surgery in partnership, so long as that partnership shall continue." This was passed for the second time, and the by-law accordingly is now repealed.

New Companies

and Company News

P.C. means Private Company and R.O. Registered Office

STAPLES, LTD. (P.C.).—Capital, £1,000. Objects: To carry on the business of dentists, etc. D. B. Bradlaw is the first director. R.O.: 82 King's Road, Chelsea, London, S.W.

HUBERT PEAKE, LTD. (P.C.).—Capital £250. Objects: To carry on the practice of dentistry as formerly carried on by H. N. Peake at 17 Market Place, Banbury, Oxon. R.O.: 17 Market Place, Banbury.

John C. Steele & Co., Ltd. (P.C.).—Capital £2,500. Objects: To carry on the business of wholesale, retail or manufacturing chemists, drysalters, merchants, etc. The first directors are: W. L. Hatrick and O. R. Hatrick. R.O.: 16 Victoria Street, Glasgow.

RICHARD HUMPHRY, LTD. (P.C.).—Capital, £500. Objects: To carry on the business of a dentist now carried on by R. Humphry at 50A Leeming Street, Mansfield; 24 Clumber Street, Nottingham; and Market Place, Shirebrook, Derby. R.O.: 59A Leeming Street, Mansfield. SHINELITE, LTD. (P.C.).—Capital, £5,000. Objects:

To adopt an agreement with G. A. Jalama, and to carry on the business of manufacturers of and dealers in polishes and paint removers of all kinds, powders, wax and essential oils, etc. R.O.: 2 Southampton Street, London, W.C. 2.

ADMANUM COMPOSITIONS, LTD. (P.C.).—Capital, £1,500. Objects: To acquire from J. M. McAlmont, of Stirling Drive, Johnstone, Renfrewshire, the formulæ for the manufacture of certain compositions called "Admanum,"
"Admanite," "Admanax," "Anfoulax," "Noncorod,"
"Nilflam" and "Corsphalt." R.O.: Eden Road, Walthamstow.

Burton, Smith & Dickinson, Ltd. (P.C.).—Capital, \$1,500. Objects: To take over the business of a manufacturer of the "Deodorator" automatic disinfector carried on by R. P. Smith at Mountgrove Works, Mountgrove Road, Stoke Newington, as Burton, Smith & Dickinson. R.O.: Mountgrove Works, Mountgrove Road, Stoke Newington.

ARTIFICIAL ZEOLITE WATER SOFTENING Co., LTD. (P.C.). -Capital, £100. Objects: To adopt an agreement with W. Boby, W. V. Boby and R. H. Froude and to carry on the business of manufacturers and suppliers of appliances, substances and materials for softening and purifying water, manufacturers of and dealers in chemical

preparations, etc. R.O.: Salisbury House, London, E.C. METAL PRESERVING Co., LTD. (P.C.).—Capital £3,000. Objects: To acquire the recipes for the manufacture of a certain preparation known as "Nuglis," and to adopt an agreement with F. A. Derry, J. L. Bennett, R. Turner and E. Hardisty, and to carry on the business of manufacturers, importers, exporters, distillers, refiners and rectifiers of and dealers in metal, furniture and grate polishes and pastes, leather dressings, leather and wood polishes and stains, dubbin, etc. R.O.: 10 Victoria Street, Liverpool.

ARELLO FOOD PRODUCTS, LTD. (P.C.).—Capital, £2,100. Objects: To take over the business of vendors of the Arello Food Products carried on by R. L. Oxley, to use the trade mark "Arello," or any other trade marks in connection with the company's business, and to carry on the business of manufacturers of the said products, and manufacturers, preservers and sellers of food preparations containing cocoa, coffee, tea, sugar or milk and allied substances as principal ingredients, and invalid, infant and medicinal foods and all chemical ingredients used in the manufacture and preservation thereof, etc. R.O.: 56 Ludgate Hill, London, E.C.

Companies dissolved.—Notice is given in the "London Gazette" that the names of the undermentioned companies have been struck off the register and the companies dissolved:—British Resorcin Manufacturing Co., Ltd.; Burton Chemical and Fodder Co., Ltd.; Dental Practitioner, Ltd.; Glassware & Chemicals, Ltd.; Herbert's (Chemical), Ltd.; Phemographicals, Ltd.; (Chemists), Ltd.; Pharmaceuticals, Ltd.

CADBURY BROS., LTD.—Mr. Barrow Cadbury has been appointed chairman in succession to the late Mr. George Cadbury. The new chairman is the eldest son of the late Mr. Richard Cadbury, and a nephew of the former chairman

MAGADI SODA Co., LTD.—The accounts for 1921 show a debit balance of £167,059. This figure includes £54,571 as provision for depreciation for year. Results obtained from working in 1921 show no improvement over those of previous year, owing to the fact that marketing of the company's soda ash did not assume sufficient volume to compensate for expenses. The directors report that according to advices they have received from the general manager in Kenya, the dredger which was specially designed for excavation of raw soda from Lake Magadi is now operating successfully. The board feel confident that this mechanical means of winning raw soda will result in a substantial increase in output and decided economy in cost of production of soda ash as compared with excavation by native labour.

Pattinson & Mackie, Ltd., 24-26 Denman Street, London, S.E., merchants and manufacturers agents. suant to Section 188 of the Companies (Consolidation) Act, 1908, a meeting of the creditors in this matter was held at the offices of Mr. P. S. Booth, Kimberley House, Holborn Viaduct, E.C., recently, when a statement of affairs showed liabilities amounting to £1,169 1s., while the assets, after deducting preferential claims, amounted of £49 6s. 3d., showing a deficiency of £1,119 14s. 9d. Mr. Booth reported that the company had passed the usual resolution in favour of voluntary liquidation, and that he had been appointed as liquidator. After some discussion the creditors decided to confirm the voluntary liquidation of the company, with Mr. P. S. Booth as liquidator. The following are among creditors:—Bataapche Handelsverlinegnig, £10; Ex Or Co., £24; Marie Perfumery Co., £20; Violiv Manufacturing Co., Ltd., £433; Carreras, A. and E., £238.

J. M. ROLLER & Co., LTD., chemical manufacturers, Hull.—The creditors were called together recently, when a statement of affairs was presented which disclosed trade liabilities of £3,125 6s. 4d. The assets amounted to £640 17s. 6d., from which had to be deducted £70 13s. for preferential claims, leaving net assets of £570 4s. 6d., or a deficiency of £2,555 1s. 10d. The assets consisted of trade debtors £350 8s. 8d., valued at £25; trading stocks on hand, including labels, bottles, etc., £80; office and warehouse fittings and fixtures, £100; amount due from J. M. Roller on share capital account, £200; due from J. M. Roller on share capital account, £188; and directors' accounts, £47 17s. 6d. It was decided to confirm the voluntary liquidation of the company, with Mr. Stanley Scotter as liquidator. The following are among Stanley Scotter as Inquidator. The following are among the creditors: A. & G. Labrique (Antwerp), £57; A. Brotherton & Co., Ltd., £27; Johnson & Sons, £37; Lamson Paragon Supply Co., Ltd., £10; Hull Oil Manufacturing Co., Ltd., £18; R. Johnson & Sons, £10; Jos. Crosfield & Sons, Ltd., £53; Price's Patent Candle Co., Ltd., £10; Sheffield Chemical Co., Ltd., £13; John Kilner & Sons, Ltd., £26; Major & Co., Ltd., £167; Products Corporation, Ltd., £27; Benzol and By-Products, Ltd., £37.

SUBCUTANEOUS VACCINATION.—We hear (states the "British Medical Journal," II., 1133) that subcutaneous (states the vaccination has been adopted under the name of inoculation to some considerable extent in London in the case of ladies during the recent prevalence of small-pox. The or pustule, resembling more or less that of variola, has commonly been regarded as essential to successful vaccination, and the extent of vesiculation—a total of half a square inch amongst four insertions—has been demonstrated statistically to be of value in respect of the duration of immunity. But the evidence of the worth of the subcutaneous method is as yet insufficient. As to immediate immunity, far more tests by subsequent scarification or incision are required. In the early days of vaccination the small-pox inoculation test and Bryce's test were applied on a very extensive scale in various parts of the world before testing was abandoned as needless."

Festivities

London College Dance

THE annual dinner and dance of the London College of Pharmacy was held at the Norfolk Rooms of the Great Eastern Hotel on December 6. Mr. C. W. Gosling pre-sided, and a large number of past and present students attended. After an excellent dinner the floor was cleared for the dance, which was much enjoyed.

The "B.D.H." Choral and Orchestral Society

A CONCERT was given on December 8 by The British Drug Houses' Choral and Orchestral Society at St. Silas' Hall, Penton Street, London, N., and was well attended. An excellent programme was provided, and part-songs by the choir, songs by Miss F. Thompson and Mr. Tombs, a violin solo by Miss G. Embery, and selections by the orchestra met—with well-deserved encores. Mr. E. E. Kippin conducted. conducted.

Edinburgh Assistants' Whist-drive

A SUCCESSFUL whist-drive and dance was held by the Edinburgh Chemists', Assistants' and Aprrentices' Association on December 13, when upwards of 100 were present. Mr. Hamilton B. Young acted as M.C., and the prize-winners were: Ladies, (1) Miss M. F. Mill, (2) Miss Wilson; Gentlemen, (1) Mr. G. H. Spittal, (2) Mr. A. M. Houston. The prizes were presented by Dr. George Coull Dr. George Coull.

Harrogate Tablet Co.'s Whist-drive

THE employees of the Harrogate Tablet Co., Ltd., held an enjoyable whist-party on December 15, to which the directors were invited. The prize-winners were: Ladies, (1) Miss Walker, (2) Mrs. Keighley, (3) Mrs. Ridge, consolation Miss Cooke; Gentlemen, (1) Mrs. Fanshawe (playing as gentleman), (2) Mr. McCourt, consolation Mr. Mallett. The managing director (Mr. A. Mortimer) expressed the hope that the gathering would become an angual event. become an annual event.

Manchester Assistants' Whist-drive

UNDER the auspices of the Manchester, Salford, and District Chemists' Assistants' Association, a well attended whist-drive was held at the Clarion Café recently. winst-drive was held at the Clarion Café recently. At the close of a very pleasant evening Mrs. Axford distributed the prizes to the following: Ladies, (1) Mrs. Sewell; (2) Miss M. W. Turner, Gentlemen, (1) Mr. Kilkenny, (2) Mr. Axford. Hidden No.: Ladies, Mrs. Rust; Gentlemen, Mr. Hough. The prizes were given by Sir William H. Veno; Boots, Ltd.; W. Mather, Ltd.; Vinolia, Ltd.; Wanders, Ltd.

Dinner at Hull

The Hull Pharmacists' Association held their annual dinner at the Grosvenor Hotel on December 14. The President, Mr. Tebb, welcomed members and guests. The toast of "The King and Royal Family" was proposed by him, and ably responded to by Mr. Lewenstein. Mr. Jones proposed "The Medical Profession," and Dr. Nelson, in responding, said that if the National Health Leyenge Act had done nothing also it had made a close. Insurance Act had done nothing else it had made a closer bend of union between doctor and chemist. Mr. Tankard proposed "The Hull Chemists' Association," and the president responded. Mr. Bennett, in proposing "The Visitors," said that, in addition to being a live association, they had endeavoured to promote the social side, and so far they had very good results. Mr. Gray responded. The toasts were interspersed with musical items.

Aberdeen Golfer's Re-union

THE Aberdeen and District Pharmacists' Golf Club held their annual reunion in the Douglas Hotel recently. The first part of the evening was devoted to whist. At supper, about 90 sat down under the chairmanship of Mr. W. G. Mitchell, the captain of the club, who announced the prize winners in the various events. event of the evening was the presentation of a handsome roll-top desk to the secretary of the club, Mr. Jas. Farquhar, who, by his energy and enthusiasm has raised the club to its present flourishing condition. It now

includes nearly every member of the craft round Aberdeen. Dancing finished up the evening, and during one of the intervals the prizes won at the whist drive were presented. The gentlemen's booby prize (a finely-carved and decorated turnip) was much admired, and Mrs. Forsyth, whose work it was, was congratulated on her artistic skill. The following were the prize winners:—

Golf.—Ness Cup.—(1) M. C. Ross, (2) C. A. Michie; Paterson Cup.—(1) M. C. Ross, (2) M. G. Duncan; Foursomes.—(1) Messrs. Forsyth & Turner, (2) Messrs. Milne & Ironside; Drummond Competition.—(1) J. Michie, (2) R. Shand, (3) W. Spence, (4) M. G. Duncan; includes nearly every member of the craft round

Milne & Ironside; Drummond Competition.—(1) J. Michie, (2) R. Shand, (3) W. Spence, (4) M. G. Duncan; Captain's Prize.—(1) A. J. Ironside, (2) J. Michie; Banchory.—(1) Miss Lockhart, (2) W. F. Hay and J. McKay (equal). Aboyne.—(1) W. G. Mitchell, (2) J. Forsyth, (3) C. Michie, (4) J. Farquhar; Cruden Bay.—(1) J. Forsyth, (2) C. A. Michie, (3) W. G. Mitchel. Whist.—Ladles: (1) Mrs. T. Milne, (2) Miss Ross. Gentlemen: (1) W. Spence, (2) T. Milne.

Westminster Wisdom

By the "C. & D." Parliamentary Representative

PROROGATION OF PARLIAMENT.

On December 15 Parliament was prorogued until February 13.

Colouring Poisons.

Mr. Doyle asked the Minister of Health, on December 13, whether investigations have been completed as to the practicability of employing distinctive colours for poisons in the form of powder, such as arsenic or strychnine; and whether the Government intends to introduce legislation to give effect to the suggestion made by one of His Majesty's judges in this regard?

Mr. Bridgeman, who replied, said that the investigations are not yet completed, and he was not in a position to make any statement at present.

Panel Doctors' Remuneration.

Sir M. Barlow stated in the House of Commons, on December 13, that the limit of the number of insured persons whom an insurance practitioner may have on his persons whom an insurance practitioner may have on his list is fixed for each area jointly by the Insurance Committee and the Medical Panel Committee. No practitioner working single-handed may have more than 3,000 persons on his list, and in a considerable number of areas a lower maximum of 2,500 or 2,000 has been fixed. Taking the country as a whole, the average number of insured persons per doctor is approximately 1,000 and the corresponding remuneration, including mileage requirements, would be remuneration, including mileage payments, would be slightly less than £500 a year. Insurance practitioners are expected to give the same standard of treatment, within the scope of their terms of service, to insured persons as they would to private patients.

THE SUPPLY OF INSULIN.

Sir W. Bull asked the Minister of Health, on December 13, whether he is aware that the Council of Medical Research is throwing obstacles in the way of the general production of a remedy for diabetes known as Insulin; if, seeing that our knowledge of the remedy has long passed the experimental stage, he can arrange that the manufacture should be left to private enterprise; and whether he is aware that a system of licences granted by the Council of Medical Research to authorised persons would afford ample protection to the public and make the remedy available much sooner than by keeping it a Government monopoly?

Sir M. Barlow, who replied, said that so far from creating obstacles, the Medical Research Council are doing everything in their power to accelerate the production and everything in their power to accelerate the production and use of Insulin in the treatment of diabetes. As regards the second part of the question, my right hon, friend is under a misapprehension. His assertion that the remedy has passed the experimental stage is not in accord with the experience of other countries or the best scientific opinion here. There is no question of any Government monopoly, and the suggestion which he makes as to manufacture is on the lines which the Medical Research Council have been, in fact, diligently pursuing for some time past.

Glaxo Price-Maintenance Scheme

GROCERS are taking a good deal of interest in the new price-maintenance scheme of the proprietors of Glaxo which limits the sale to chemists, who are required to obtain supplies from a limited number of wholesale agents. The "Grocer," in endeavouring to get at the reason why Glaxo was withdrawn from the protected list of the Proprietary Articles Trade Association, addressed questions to Sir William Glyn-Jones. These we give with the answers of Sir William, as secretary of the P.A.T.A.:—

Is the P.A.T.A. responsible for the stoppage of sup-

plies to grocers?

The P.A.T.A. has no responsibility whatever for the attempt to restrict the trade in Glaxo to pharmacists. It has been taken by the firm on their own initiative since their article was removed from the P.A.T.A. list. The only concern of the Association has been to guarantee adequate profit by means of protected minimum prices to traders, of whatever class, who handle by wholesale or retail the articles on its list. Glaxo was removed from the P.A.T.A. list not because it was sold by grocers, but because its selling prices were "cut" by grocers. Messrs. Glaxo were not asked to cut off supplies to the grocery trade, but to restrict the number of wholesale channels through which the article reached the grocery and so to citable the investor. article reached the grocer, and so to cipher the tins as to identify the wholesaler who sold to the "cutter." Whilst Glaxo was on the P.A.T.A. list, its proprietors, by means of special circulars to grocers, urged them to push its sale. They advertised it as a dried milk useful for making puddings, appointed grocery firms as as September of this year, exhibited it at the Grocers' Exhibition. The P.A.T.A. made no complaint of these things, but put forward definite and practical proposals whereby chemists and grocers or any other class of retailer of Glaxo could be guaranteed a profit.

Can you explain their sudden change of policy?

Not unless it is a desperate bid for the support of retail pharmacists in a fight which the firm is waging with P.A.T.A. wholesalers since the article has been removed from the list. The P.A.T.A. Executive regret this attempt to play off one section of the Association against another.

Does the Association approve of the principle?

I am not authorised on behalf of the Association to am not authorised on behalf of the Association to express an opinion, but I may point out that the sole object of the Association is, and always has been, the protection of a profit to all the distributors of proprietary articles. It has never been discussed by the Council, but, in my own opinion, however good may be the maxim of the cobbler sticking to his last, its application to the trade in proprietary articles is fraught with difficulties. I can say that, if a contest is to arise between grocers and chemists on this issue, the P.A.T.A. could not support a claim to the exclusive right of pharmacists to sell Glaxo without recasting its constitution, shedding a large number of important articles from its list, and losing many of the influential members of its Manufacturers' Section. The first rule of the Association indicates in its present constitution the non-exclusive character of its membership :- That the Association shall consist of manufacturers of proprietary articles and of wholesale and retail vendors of the same, who give evidence of their being in sympathy with the objects of the Association.

Is not what has arisen an argument for the formation of a grocery P.A.T.A. as a separate organisation or an organisation to work in conjunction with the P.A.T.A.?

Most certainly! What has transpired emphasises the need for efficient price maintenance in the grocery trade. In 1897 my Association tried to organise a grocery section, and actually started one. Events proved that the grocers were not then ready for such a move. Last year again the P.A.T.A. called confer-

ences of prominent members of the grocery trade, manufacturers, wholesalers and retailers, to discuss the possibility of the establishment of a grocery P.A.T.A., either as a separate organisation, or affiliated with my Association. It was made clear that whichever of these courses was ultimately decided upon, my Associathese courses was ultimately decided upon, my Association would be prepared to support it. Nothing has as yet materialised from those efforts. In my view, nothing will, unless retail grocers want it to, and bestir themselves. In the grocery trade there are greater difficulties in the way than the P.A.T.A. encountered in the drug trade, but they are not insurmountable. It would be unseemly for my Association or myself to do more then we have done in greatly in the state of the property of the support of the state of the support of the suppor or myself to do more than we have done in meddling with the affairs of the grocery trade. I can only say that any assistance it is in our power to give to grocers in this direction is theirs for the asking. Whatever may happen, the warning in your excellent editorial of last week, against the danger of grocers and chemists being played off against each other in the interests of any proprietary article, is timely, and I should like to associate myself with it.

Almanacs and Calendars

WE have received copies of various almanacs, calendars and similar publications distributed at this season by wholesale and retail houses. The following have reached us up to the time of going to press :-

The R. H. Heward Co., surgical-appliance manufacturers, Crown Road Works, Twickenham, issue a waist-coat-pocket calendar (2 in. by $1\frac{1}{2}$ in.), bound in leather and comprising postal and other information in the compass of its sixteen small pages.

Mr. P. Barrs, F.C.S., manufacturing and dispensing chemist, Church Street, Kensington, London, W. 8, sends out a wall calendar (11 in. by $14\frac{1}{2}$ in.), having as its central feature a striking reproduction in colour of R. Atkinson Fox's picture entitled "A Royal Outlaw" the outlaw being a Bengal tiger.

RIDLEY'S ALMANAC (8½ in. by 5½ in.), issued by T. Ridley & Son (Chemists), Ltd., Carlisle, has reached its thirtieth year. Messrs. Ridley point out in their preface that the annual issues have consisted of 10,000 copies each-a form of cumulative advertising which, no doubt, has fully justified itself. In the course of sixty-four pages much useful information, general and special, is given.

HOWARDS & SONS, LTD., Ilford and Stratford, London, E., distribute a wall calendar (14½ in. by 10½ in.), which is available for any chemist sending Messrs. Howards a postcard. Unusual interest attaches to the calendar by reason of the fact that in 1823 Luke Howard, F.R.S., the founder of the company, began the manufacture of quinine. This manufacture and research connected with it have since been carried on continuously by four generations of his descendants; and the greater part of the calendar is appropriately devoted to colour prints of flowering tops of various cinchonas, together with analythat Howards' ouinine is entirely British. We may add that it is just twenty years since the firm was converted into a limited company, on which occasion (C. & D., II., 1903, p. 581) we gave an outline of its history. A portrait of Luke Howard appeared in the C. & D., I., 1903, p. 180.

THE UNITED STATES GOVERNMENT has appointed Dr. Rupert Blue, Assistant Surgeon-General in the American Public Health Service, to take part in the work of the Advisory Committee on Traffic in Opium in an unofficial and consultative capacity.

Not "HARDER THAN BEZIQUE."—In the "Morning Post" of December 15 the following effort of a medical practitioner "in a humorous moment" was quoted as a prescription given in a case of "general" weakness: "100.0.500. 50. 1. 5. ER. 0.1. 50." It would probably strike a chemist receiving it as an "At the Counter" preciment of average ments. specimen of average merit.

Analytical Vigilance

The current monthly report (No. 253) of the medical officer of health for the City of London deals at some length with three matters of interest to the drug-trade, and with a fourth which, although of slight importance, indicates the thoroughness with which Dr. Howarth fulfils the duties of his office. The last-named question is that of the contamination of sauces with copper, which in two instances has been found present to the extent respectively of 1.4 and 0.7 gr. (calculated as crystallised copper sulphate) per lb. The probability is, states the report, that its presence is due to accident arising from the nature of vessels used in manufacture. The following observations on dispensed prescriptions, borax and gelatin are taken textually, with slight compression, from the report itself.

PRESCRIPTIONS FOR PANEL PATIENTS

The following eight prescriptions have been examined by the public analyst. The prescriptions are taken from the Pharmacopœia of the London Insurance Committee.

No. of Sample	Prescription	Result of Analysis
88 4 885 886	Mist. sodii. sal.	Genuine Deficiency in sodium salicylate 19 per cent., in potassium bicarbonate 23 per cent.
88 7 888 889	Mist. pot. brom.	Genuine Deficiency in potassium bromide 8 per cent., in ammonium
890	22 27	carbonate 5 per cent Deficient in ammonium carbon- ate to the extent of 34 per cent.
891	,, ,, -	Excess of potassium bromide and of ammonium carbonate 9 per cent.

From the above it will be seen that the constituent elements of the prescriptions vary from the Pharmacopæial requirements in four out of eight instances.

In the case of deficiency in ammonium carbonate, Dr. Teed submits the following note:—

"Ammonium carbonate has no very definite composition. The ammonium carbonate of the British Pharmacopæia is a mixture of acid carbonate of ammonium and ammonium carbonate, and should contain 30.6 per cent. of ammonia. 'Exposed to the air it becomes covered with a white efflorescence which is only superficial; this efflorescence should be scraped off before the salt is used for dispensing.' As a matter of fact if sufficiently exposed to the air the whole mass is converted into this efflorescence, which contains much less ammonia, as low as some 24 per cent. Previous British Pharmacopæias required lower percentages of ammonia than 30.6."

In the case of samples 889 and 891, the deficiency in one and the excess in the other is perhaps due to careless dispensing, and I suggest that a communication be forwarded to the Pharmaceutical Society of Great Britain inquiring what, in the opinion of the Society, is the limit of error which should be accepted as permissible in prescribing work.

Borax

In connection with food products it is used to soften water on a large scale, or it may be added to water in which vegetables are cooked. It is the preservative most generally used for dredging game, poultry, meat and fish. It is increasingly used to cure bacon and ham. As a preservative it is added to dripping, butter, lard and similar products. . . It is probable that in making a purchase a purchaser would go to different shops according to the purpose for which it is required. If it is required for use as a preservative, the purchase would be made at the chemist's; if for general use, the grocer might be applied to. It is probable that this is an accurate rough differentiation, but the following results would appear to indicate that some clear statement should be made on the packet which would indicate that the product either was pure borax or commercial borax, which

is not guaranteed to be free from arsenic.... In view of the above facts and of the additional fact that the Royal Commission on Arsenical Poisoning recommended the maximum of 1.4 parts of arsenic per million in foodstuffs, and the British Pharmacopeia sets the standard [for arsenic in borax] of not more than 5 parts per million, the following results are significant:—

No. of	Description	Business carried on at place	Results of Analyses		
Sample		where sam- ple was purchased	Per cent.	Parts per million	
822	Ground borax	Grocer	0.0150	150	
582	,, ,,	Provision	0.0150	150	
	,, ,,	Dealer			
584	- ,, ,, -	Grocer	0.0100	100	
585	,, ,,	Oilshop	0.0100	100	
823	Domestic borax	Chemist	0.0034	34	
824	Ground borax	Oilshop	0.0034	34	
830	,, ,,	Oilshop	0.0030	30	
825	,, ,,	Chemist	0.0014	14	
628	Borax	Chemist	Conforme	d to B.P.	
			requirements.		
630	Refined borax	Chemist	,,	- ,,	
632	Pure borax	Chemist	,,	,,	
638	Refined borax	Chemist	,,	,,	
829	Ground borax	Oilshop	,,	,,	

Five more samples of "ground borax" were examined (three of them purchased from chemists), with the result that arsenic was declared to be absent; two more samples of "refined borax" (one from a chemist) were tested with a similar result.

GELATIN

The last official report by an officer of the central authority, with which I am acquainted, dealing with gelatin, is that contained in the appendix of the Royal Commission on Arsenical Poisoning submitted by Mr. Hammond Smith. His inquiry particularly referred to the presence of arsenic in this product. The only standard within my knowledge specifically affecting gelatin relates to the presence of sulphur dioxide and is contained in the regulations of the New Zealand Government, which state that gelatin may contain sulphur dioxide in proportion not exceeding 3½ gr. of sulphur dioxide to the pound of dry marketable gelatin sold for consumption by man. Declaration of the presence of sulphur dioxide is not required unless the proportion contained in the product exceeds ½ gr. to the pound. It is further required that gelatin which is being sold for human consumption shall bear on the package the words "For Food." The following tabulation shows the results of the examination of twenty-one samples of gelatin sold either in the form of loose sheets, powdered gelatin, on of gelatin in small pieces or in the form of concentrated jelly.

No. of	In what form		Presence of Sulphur Dioxide		
Sample			Amount per cent.	Grains per lb.	
404 415 414 814 542 811 813 812 815 817 819 818	Loose sheets Powder "Crystals" Loose sheets Small pieces (pkt.) "" Powder Concentrated jclly Powder		0.130 0.060 0.040 0.032 0.026 0.026 0.019 0.019 0.013 0.010 0.006	9.10 4.20 2.80 2.24 1.82 1.82 1.33 1.33 0.91 0.70 0.42	

Nine other samples of concentrated jelly and the like that were examined gave negative results; and all, as well as those in the table, were free from salicylic acid. Dr. F. L. Teed, F.I.C., the City public analyst, conducted all the analytical investigations.

Practical Wireless Telephony

III. Aerials

When the high frequency waves meet with a conductor they induce in it an oscillating current of the same frequency and, if other conditions are favourable, of the same wave length; but in order to take useful advantage of such oscillating currents a suitable form of conductor must be employed. This is the receiving aerial, which in its simplest and most efficient form may be a single strand of wire of any convenient length held in a vertical position and supported upon insulators of high resistance. Such a form involves the erection of a tall mast well away from any high building which might interfere with the free reception of the message waves. Fortunately, a horizontal system of one or more wires at a reasonable height forms an efficient receiver and, provided it is anything up to 80 or 100 feet in length, can, by means of condensers and inductance coils, be constrained to accept waves of varying lengths over a long range. This is called tuning. There are three types of aerials in general use for reception:—(a) the single filament; (b) the double or "roof" type; (c) the umbrella or tent form.

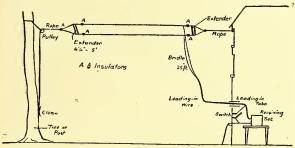
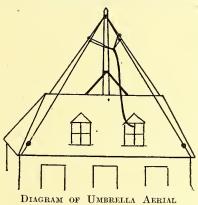


DIAGRAM OF DOUBLE AERIAL

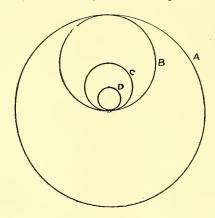
Where convenient to erect, a double aerial wire with wood or bamboo extending rods (about 4 or 5 feet long) is very efficient. The total length from extender to extender, together with the lead-in wire, must not exceed 100 feet (P.M.G. regulation). If only a limited distance is available, a roof type may be made of three or four filaments mounted on triangular or square frames, or the umbrella type may be used. The total height of house and pole must not exceed 100 feet, the latter being kept in position with stout wire stays. A system of three or four lengths of wire furnished with good insulators is carried from the top of the pole to the edges of the roof or other points of attachment, and a bridle connecting all



the wires near the upper insulators is connected by a lead-in wire to a suitable window—if carried over the edge of the roof it should be held by an insulated rod a few feet from the metal guttering to avoid loss of current by induction. The kind of wire employed does not matter much, but iron, unless galvanised, should be discarded, as its efficiency is the lowest among ordinary material.

Copper, bare or enamelled, is best, and for strength and resistance to weather the silicon bronze used by the telephone authorities cannot be beaten. As H/F currents do not pass through the wire, but are carried on its surface, many authorities recommend the use of stranded wire, and recently a wire has been manufactured for this purpose having a hempen cord braided closely over its surface with fine wire similar to that used in high quality electric light flex. The way in which the surface relatively increases as the sectional area or substances diminishes is shown in the diagram—where each circle is successively half the diameter of the enclosing circle. If the large circle A is regarded as a wire having a circumference (or surface) of unit value and a substance or weight per foot of a like description, the relations of surface to substance will be:—

A Surface 1 Substance 1 C Surface $\frac{1}{4}$ Substance 1-16 B Surface $\frac{1}{2}$ Substance 1-64



so that if eight wires like D are used to replace A the effective surface will be the same, but the substance or weight of equivalent lengths will be only 8-64th or 1/8 of A, and in theory should give the same efficiency at a less expenditure of material. It is well to avoid soldered joints wherever there may be any strain, as, in addition to the inherent weakness of solder, the heat used may affect the tensile strength of the conductor wire or the flux may tend to corrosion and consequent weakening of the filament. In mounting an aerial, therefore, while the distant end is finished off with a twisted joint, the home end should not be cut off, but brought round the insulator, bound to the line, and bent lack to form the first part of the bridle which is joined to the covered lead-in. If a well insulated lead-in wire is used, it may be simply brought through a hole in the window sash, but it is preferable to carry it through a porcelain or ebonite tube inserted through the wood- or the brickwork and carried to a suitable terminal, also well insulated, from which it can be connected by a flex to the receiving set. The wire should be taken in and out of one end of a porcelain single throw knife switch and on to the terminal marked A of your set. Each member of a double or multiple aerial should be exactly the same length, so that all concur in tuning to the same wave length in just the same way as the double strings of piano or mandolin are tuned to the same pitch, or their combined note would be harsh and discordant. The insulators employed are of various types known as the egg, F type (a cylindrical form), bobbin, shell, mushroom, and many others, of which some are the subject of patents. The object of each is to preserve a dry zone under all conditions so that the aerial currents shall be restricted to the desired path. It is good economy to be lavish in the use of insulators in series, so that should one break down, there may still be others to block any leakage of electrons.

The egg and shell type insulators are constructed so that the porcelain is never under tensional strain, but always under compression, the wire and the rope supports threading through each other, but kept internally apart by the porcelain. From the E terminal carry an insulated

wire first to the other end of the knife switch and then over the window-sill to the nearest earth-an iron bar stuck into the ground two to four feet does very, well, or it may be connected to the nearest water-pipe, either with touch of solder or wrapped tightly round and a nail forced between the pipe and the wrapped wire. The switch when open allows the passage of the currents through your receiving set and on to earth. When closed it offers a short direct path to earth for atmospheric electricity, protecting your instruments from lightning and obviating the necessity of disconnecting every time you wish to lay down your phone.

Ergot Preparations

IT will be remembered that Mr. F. H. Carr, F.I.C., and Dr. H. H. Dale, read a paper at the Jubilee meeting of the British Pharmaceutical Conference in London in 1913 on the preparations of ergot, when it was suggested that the British Pharmacopæia monographs should be revised as follows:

1. Ergots, other than rye ergot, should be sanctioned if standardised for active alkaloid.
2. Ext. ergotæ should be abandoned. If a soft extract is

needed, one would be preferable prepared with 60 per cent. alcohol, acidulated with citric acid.

3. Ext. ergotæ liq. should be replaced by the U.S.P. preparation (49 per cent. alcohol containing 2 per cent. acetic

acid).
4. Inj. ergotæ should be replaced by suitable salts of ergotoxine.

5. A satisfactory tincture could be made with 60 per cent. alcohol.

The paper is recalled by a discussion on the use of ergot in obstetric and gynæcological practice at a joint meeting of the Sections of Obstetrics and Gynæcology and of Therapeutics and Pharmacology of the Royal Society of Medicine on December 7. As reported in the medical journals, Dr. H. H. Dale opened the discussion, and in the course of his address dealt with the relative activity of the various ergot preparations. According to the "Lancet" (II., 1922, 1276), he referred to the suggestion of Professor W. E. Dixon that the potency of the therapeutic extract of ergot could appropriately be measured by its power of raising the blood pressure. Other workers had suggested using isolated uterine muscle as a test substance and were led by this method of testing to attribute particular potency to dialysed ergot, which contained no ergotoxine. Meanwhile, various chemists had identified the pressor substance in commercial ergot as tyramine and the activator of isolated human muscle as histamine. These proved to be putrefactive bases easily synthesised, and not alkaloids specific to ergot. Tyramine was easy to obtain from tyrosine and histamine from cheese. Putrefactive bases form a fairly abundant constituent of certain preparations derived from the soy bean, and the action of ordinary bacteria produces them in the normal intestine. It thus seemed an extravagant assumption to suppose that they would have a marked therapeutic effect, and the problem remained unsolved. During the last few years a new point had arisen. Dr. Stoll, of Basle, extracted from ergot an alkaloid which he described as the long-sought active principle, and called it ergotamine. It was evident that this substance resembled closely ergotoxine. Both were substances of very high molecular weight, and even if not exactly similar in formula were obviously closely allied. Certain preliminary physiological experiments, however, appeared to show that its pharmacological action was different from that of ergotoxine. Dr. Dale had suggested that the point should be cleared up by an exchange of specimens, and after a few months both sets of workers were in complete agreement that no difference between the pharmacological action of the two extracts could be established. The question, then, remained at the stage of inconclusive evidence as to whether the therapeutic action of ergot is due to its specific alkaloids on the one hand, or to the putrefactive bases on the other. The practical points arising are as follows: If the specific alkaloids are the important factor, the case for retaining ergot in the B.P. is established, but the extracts should then be made so as not to lose the alkaloids in the process of extraction. If, on the other hand, the putrefactive bases are responsible for the therapeutic action, there is no case for retaining ergot in the B.P.—it would then be better to prepare these by other means. The value of certain proprietary preparations might have to be estimated by clinicians. The citrate as now prepared did contain the specific alkaloids. Ergotamine, which was sold as gynergin abroad and femergin in this country, might be allowed a more systematic clinical trial, and if the conclusions were favourable the specific alkaloids might be reinstated as the active principle. At any rate, what is true of ergotamine is also true of ergotoxine. On the basis of safety the preparation sold as ernutin by Burroughs Wellcome & Co. used to contain tyramine, histamine, and ergotoxine. In the later war years the last-named became unobtainable, and ernutin for some time was issued without ergotoxine. It would be interesting to know whether any difference in clinical results had been observed. Ergot used to be employed largely in obstetrical work. It had now been to a great extent replaced by pituitary extract, but was still used in obstetrical and also in gynæcological work. Possibly the preparation of ergot needed for gynæcological

cases differed from that desirable in obstetrics.

The discussion which followed was chiefly notable for a defence by Sir Nestor Tirard of the method upon which preparations were selected for inclusion in the British Pharmacopæia. He said the editors endeavoured to act on information received, and had tried to elicit medical opinion as to what should happen to the ergot preparations. The procedure adopted was to send inquiries to the nineteen licensing authorities for suggestions as to omissions, alterations, and additions to the B.P. Not one of these nineteen authorities had one of these nineteen authorities had the omission of any preparation of suggested ergot. Manchester had registered a pious opinion that the preparations might be improved, but gave no further help in the matter. Another centre had suggested that only the active principle should be employed. Still another had proposed that the ergot preparations should be standardised physiologically. Up to the present time Sir Nestor said this was not possible in this country, in contrast with Germany and America. Dr. Dale had said practically the same thing of pituitary extract, and it is to be hoped that he may soon be able to give us an efficient standard for ergot also. When the means of standardisation are available the B.P. would do its best to control the standards. Incidentally, the fact that a drug is not present in a large number of prescriptions is no indication that it is not in common use by the profession. It is true that in not one of many thousands of prescriptions analysed officially was any preparation of ergot present, but this might mean only that it was considered dangerous to give patients a prescription for this drug, and did not prove that it was not used by the doctor himself. Sir Nestor set forth the attitude of the editors of the B.P. as a desire to know what the profession wants—not an ephemeral want, but that of a large number of the practitioners of the country—and to act on these requirements. If practitioners let their wishes be known through one of the licensing bodies they would receive attention. Moreover, those responsible for the B.P. would be glad to use a State laboratory for physiological standardisation of drugs, were such a one established. Later on Professor Dixon said with regard to the B.P. that pharmacologists are clear that the American liquid extract is far superior to the British liquid extract. Sir Nestor Tirard had intimated that the editors of the B.P. were out to produce standards of those drugs which are commonly used—i.e., that they are pre-pared to follow in the wake of, but did not attempt to lead, the profession. How, then, should we advance? Practitioners tended to follow the B.P. as an authority guiding them as to which preparations of drugs they should use. In this way a circle is established, from which there appears to be no escape.

St. VINCENT ARROWROOT .- The export from St. Vincent during 1921 amounted in value to £21,216, against £52.771 in 1920.

Birth

SLOPER.—At 169 Wimborne Road, Bournemouth, on December 12, the wife of Lewis J. Sloper, M.P.S., of a son.

Marriage

CLAGUE—CRENNELL.—At St. Mary's Church, Heworth, on December 14, William Douglas Clague, M.P.S., elder son of Mr. and Mrs. T. Maltby Clague, Newcastle-on-Tyne, to Jane Taubman, only daughter of the late Mr. W. T. Crennell and of Mrs. Crennell, Kamsey, Isle of Man.

Deaths

Doig.—At Belfast, on December 14, Mr. Frederick Doig, youngest son of Mr. William Doig (William Doig & Co., wholesale druggists, 39 Mill Street). Mr. Doig, who died at an early age as the result of complications following a chill, was a medical student at the Queen's University when the war broke out. He received a commission in the 7th Royal Munster Fusiliers, and subsequently transferred to the 15th Royal Irish Rifles (Ulster Division). He was wounded in France in 1917, and was awarded the Military Cross.

EATON.—In West London, on December 5, Mr. John Eaton, chemist and druggist, aged eighty-two.

FINEGAN.—At his residence in Belfast, on December 14, of pneumonia, Mr. Thomas Finegan, Ph.C., 120 Royal Avenue, aged forty-three. Mr. Finegan was a native of Dundalk, where he served his apprenticeship to Dr. Flood. After passing the Licence examination in 1905 he commenced business in Belfast, becoming widely known and esteemed for his genial disposition. He leaves a widow and three children.

Macdonald.—At Orotava, Teneriffe, on December 16, Mr. Andrew Macdonald, senior partner of John Poynter, Son & Macdonalds, manufacturing chemists, Greenock, aged seventy-five. The firm, of which Mr. Macdonald and his brother had latterly been the sole partners, was established in 1825 in Glasgow, removing to Greenock in 1832. Messrs. Macdonald commenced business in 1887, and amalgamated with the older concern of John Poynter & Son four years later. They had an extensive connection in such chemicals as superphosphates, sulphur, and ammonium sulphate.

Maudson.—At Canterbury, on December 13, Mr. Beresford Frederic Harold Maudson, chemist and druggist, aged sixty-four.

TAMPLIN.—At Farncombe, Godalming, on December 9, Mr. Charles Edward Tamplin, Ph.C., aged sixty-eight.

Personalities

Mr. Dawson Lloyd, South Coast representative of John Richardson & Co. (Leicester), Ltd., has been elected a Fellow of the Chemical Society.

COUNCILLOR ALBAN ATKIN, M.P.S., V.est End Lane, London, N.W., has been re-elected to the Works, Public Health and Assessment Committees of the Hampstead Borough Council, as well as to a special committee and to various sub-committees.

WE learn that Mr. J. Stanley Holmes (Genatosan, Ltd.), to whose political contest in North-East Derbyshire reference was made in our issue of December 16 (p. 851), has lodged an election petition alleging certain irregularities in the conduct of the election.

Mr. H. C. Quelch, of Henry C. Quelch & Co., 4 and 5 Ludgate Square, London, E.C.4, has returned from Australia after an absence of twelve months. During his visit there and to New Zealand Mr. Quelch established the firm of A. Bourjois et Cie. (Australia), Ltd., and that of Henry C. Quelch & Co. in Sydney, and has also opened an agency in Auckland under the care of Mr. F. R. Marriott.

At the Installation of the Edward Terry Lodge, held in London on December 14, the following members of the drug-trade were present:—Bro. Alban Atkin, S.W., Bro. John W. Royle, S.W., W. Bro. A. J. Rickford, Bro. C. W. Baker (Nuneaton), Bro. Donald J. Grant, Bro. A. J. Greatrex, Bro. W. C. Tarry, Bro. W. E. D. Shirtliff, Bro. W. Lloyd Evans, Bro. E. A. Atkins, W. Bro. J. W. Quibell, Bro. Osmond Morris (Sutton).

Mr. David Reynolds, London manager to Goodall, Backhouse & Co., Leeds, was the guest of honour at a dinner of the South Herts Golf Club, of which he is ex-captain, on December 16. In the course of the function (held at the club house, Totteridge), Mr. Reynolds was presented with a pearl pin and Mrs. Reynolds with a diamond brooch. A high tribute was paid to the retiring captain's sportsmanlike qualities, and Mr. Reynolds suitably replied.

At the meeting of the Public Health Committee of the Oxford City Council, on December 20, Alderman G. Claridge Druce, LL.D., relinquished the chairmanship (having accepted the chairmanship of the Parliamentary Committee), which he had held for twenty-six years. A hearty vote of thanks was passed to Alderman Druce for his valuable services. Alderman Druce is about to give his twentieth annual lecture in the University Museum: his subject on this occasion will be Holland and Norway.

SIR JOHN S. P. Wood, Bt., who has been figuring of late in the doings of the London Scottish football team, is the fifth baronet in descent from Sir Matthew Wood, a native of Tiverton. In 1781, at the age of fourteen, Matthew Wood was apprenticed to a Mr. Newton, an Exeter druggist: he afterwards became a traveller in the drug-trade, established himself in Falcon Square, London, on his own account, and gained wealth as a hop merchant. He was Lord Mayor for two successive years (1815-17), and a member of Parliament from 1816 to 1843. His second son became Baron Hatherley, and was appointed Lord Chancellor in 1868.

Wills

Mr. Joseph Johnston Ferguson, chemist and druggist, 453 Romford Road, Forest Gate, London, E., who died on November 19, left estate of the gross value of £2,157 15s. 6d., with net personalty £1,223 10s.

MR. WILLIAM BUDDEN, Strathyre, Heswall, Cheshire, chairman of Budden & Co., Ltd., Renshaw Street, Chester, manufacturing chemists, who died on September 25, left £7,212 15s. 11d., with net personalty £6,366 10s. 8d. Probate is granted to his son, Dr. Charles Wm. Budden, Market Street, Hoylake, and Herbert Thompson Smith, of 7 Barrington Street, Liverpool. The testator gives all the property to his wife during widowhood, and subject thereto his shares in Budden & Co. to his son Charles William, £200 a year to his daughter Lilian, and the remainder of the income to his son Lionel. On the death or re-marriage of his wife and the death of his daughter the ultimate residue is to be divided between his two sons.

MR. JOHN WYLDE, J.P., chemist and druggist, Mayfield, Chislehurst, senior partner of Thomas Keating, manufacturing chemists, 50-58 Union Street, Borough, S.E., and of John Wylde, drug grinders, Walworth, London, S.E., died on October 5, leaving estate of the value of £49,480 9s. 6d., the net personalty being £28.242 12s. 5d. Probate is granted to Cecil Richard Wylde (son), Sundridge Avenue, Bromley; Annie Clara Wylde (daughter). Mayfield; and William Murrell Barnard, Portland House, Basinghall Street, E.C. The will reads: ""Having for many years past given liberally to the extent of my means to various persons, institutions and charities, I do not, in view of the onerous death duties, feel justified in giving away any further sums." His son. Čecil Richard, being already provided for, he gives £500 to his wife, £50 to Mr. Barnard, and the residue in trust for his wife for life, then for his daughter for her life, with ultimate remainder to his son.

Trade Notes

W. B. CARTWRIGHT, LTD., Rawdon, nr. Leeds, inform us that they now pay carriage, and give cases and containers free, on all orders for £2 and upwards.

SAFETY RAZORS.—Mr. Louis J. Stambois, 34 Call Lane, Leeds, issues a trade price-list of various kinds of safety razors, scissors, cigarette-lighters, copies of which can be had by chemists on application.

SEASONABLE PRINTING,—Thomas Waide & Sons, Ltd., Leeds, send us a batch of printing for use with winter goods. These include bills and showcards advertising hot-water bottles, cough mixture, cod-liver oil emulsion, pinene and Kurakold. Stock cartons are also supplied for some of these lines. Chemists who wish to brighten business should send for some of these samples.

KANDU RHEUMATISM REMEDY is advertised in this issue by The Baron Products Co., St. Thomas's Laboratories, Portsmouth. The remedy retails at 2s. 6d., 4s. 6d., and 7s 6d., and is obtainable from wholesale patent medicine The company have sent us copies of testimonials received from patients who have been cured. A pamphlet which describes the discovery of Kandu states that it is made of Mexican herbs which have a wide repute in Mexico for the cure of rheumatism and similar ailments.

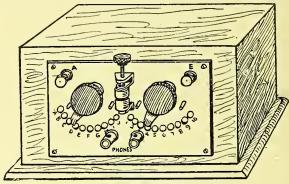
CREPE BANDAGES.—Grout & Co., Ltd., Great Yarmouth, who sell the Norvic crêpe bandages, inform us that the requirements of the Ministry of Health standard as laid down in the British Pharmaceutical Codex are fulfilled in their bandages. The company also tell us that foreignmade bandages are being offered to chemists which are made entirely of cotton instead of wool and cotton as required by the above standard. For this reason chemists are urged to sell bandages with a definite quality guarantee.

FORHAN'S TOOTH PASTE.—This is a new product brought out by the makers of Forhan's For the Gums. Chemists will have received particulars of the tooth paste, which is put up in collapsible tubes and retails at 1s. 6d. and 2s. 6d. A bonus offer of half-a-dozen tubes is made for a first order of three dozen of Forhan's tooth paste, and very charming showcard is being offered to chemists. This showcard measures 15 by 10, and is printed in dark blue and terra cotta, the background being a photographic representation of a woman's face with rows of perfect

Christmas holidays.—In addition to the houses mentioned in last week's C. & D. (p. 850), J. T. Davenport, Ltd., 117 Union Street, London, S.E.1, inform us they will be closed from Friday evening, December 22, until Thursday morning, December 28, and the Thermogene Co., Ltd., from Friday evening, December 22, until Wednesday, December 27. Burge, Warren and Ridgley, Ltd., 91 and 92 Gt. Saffron Hill, announce that they will close from Saturday, December 23, until Thursday, December 28, and Howards & Sons, Ltd., Ilford, from Friday evening, December 22, until Wednesday morning, December 27. The offices of Messrs. Howards will be cheed on December 25 and 26 only.

STABILARSAN.-We learn that Stabilarsan, manufactured by Boots Pure Drug Co., Ltd., Station Street, Nottingham, has been placed on the list of approved substitutes for salvarsan recognised by the Minister of The drawbacks attaching to pre-existing arseno-Health. benzol preparations are so well known that there is no need to recapitulate them here; it will suffice to say that the importance of Messrs. Boots' contribution to arsenobenzol therapy consists essentially in the preparation of a popularly water soluble converted to the control of the contr tion of a neutral, water-soluble compound of salvarsan and glucose remaining stable in solution. The benefit of this innovation to the medical practitioner is self-evident. Stabilarsan is supplied in four dose-strengths The benefit in amber-coloured ampoules, each provided with a cutting file. It is ready for either intramuscular or intravenous injection, and its toxicity is claimed to be lower than that of any other arsenobenzol preparation. Messrs. Boots issue a scheme of routine treatment based on that arranged by Colonel L. W. Harrison, director of St. Thomas's Hospital Venereal Disease Clinic.

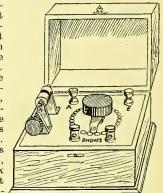
Wireless Supplies.—The interest in wireless telephony has greatly increased since we first suggested last June that chemists would find it a suitable side-line in their business. The fraternal advertisement in the C. & D. of the City Wireless and Electrical Depôt, 17 Hatton Garden,



Ceebee No. 1 Set.

London, E.C.1, has attracted considerable attention because of the fact that Mr. M. E. Swan, the conductor of the business, is a qualified chemist, and is especially catering for chemists, to whom, as dealers, wholesale terms are given. Mr. Swan recently supplied us with two of his crystal receiving sets for testing, and after compara-tive trials we are able to

write that notwithstanding the moderate price at which the sets are marketed they are excellent and receive the London broadcasting programme with perfect clearness. The small set shown here is known as the "Ceebee" Junior set No. 3, and is retailed at 35s. (including B.B.C. fee), The mahogany case measures $5\frac{1}{4} \times 4 \times 4\frac{1}{4} \text{ in. (deep)}.$ The larger illustration is the "Ceebee" No. 1 set, the case measuring 10 x $6\frac{1}{2}$ x 6 in. (deep). This set retails at £3 5s. (includ-zing fee). The trade discounts, which are liberal,



Ceebee No. 3 Set.

are not, of course, allowed off the "B.B.C." fees. Mr. Swan publishes a booklet, entitled "Wireless Made Easy," which he supplies to chemists for sale at 6d. each. It contains an account of the chief facts in wireless telephony, written in a popular manner. Price lists, which include other wireless apparatus and accessories, as well as general electrical goods, are issued.

Information Department

INFORMATION WANTED

W/1512. Alkocalcine S/1512. Antidipso A/1812. Dicthol or Diethol L/1312. Elixir Vi-Glandis M/1121. Ferovarin Tablets G/1212. Madame Huntingford's Hair Oil W/1512. Pepto-Pancreatin

H/1812. "Princesse" Face
Powder (made by
P. H., Paris)
A/1512. Radio Laxative Tablets (French make)
B/1512. Witte's Peptone (London supply)
H/512. Zymase H/512. Zymase

INFORMATION SUPPLIED

"Anti-Py-O" Tooth Paste, "Anti-Py-O" Tooth Paste, M/1212
Arly's Perfumes. H/1412
"Clayton" gassing apparatus. Collapsible metal tubes, S/1912
Collapsible tube-filling machines. W/1912
Comprimes Vichy Etat (Pruniers), F/1812
"Cona" glass flasks. L/12
Curexema, E/1312
Lodogen. B/712

Mavis Perfumery. P/1412
Pagliano's Syrup. S/1912
Phenalgin. S/1112
"Pigmy" tablet macl
M/1812

M/1812 machine.

M/1812
Pistany Mud (for rheumatism).
A/1212
Po-Ho Inhaler. A/1812
Rowland's Macassar Oil. S/1912
Schimmel's products. H/1812
Talc. powder tins. S/1912

Observations and Reflections

By Xrayser II.

Your Exhaustive Article

on the proposed new educational standard is a complete answer to the question whether qualification under the new scheme will be more or less difficult than at present. The question may be one of secondary importance, and the Council might perhaps reasonably have ignored it, but since they have not only not done so, but have in their preliminary discussion of the proposals professed an open mind upon the subject, it is difficult to acquit some of them either of judicial blindness or, alternatively, of insincerity. There is absolutely no doubt that, apart altogether from the raising of the Preliminary, qualification will, if these proposals are accepted, be a much more formidable task than it now is. Those Councillors who are honestly in doubt about it are ill-fitted to legislate on such a subject, and one cannot but suspect that they are being hoodwinked by their more astute colleagues. The other question: Does the condition of pharmacy in this country The other warrant this raising of the standard? remains to be con-I have seen nothing in the utterances even of our extremer educationists that lends any colour to the idea that it does, nor have I heard a single pharmacist contend that our qualification needs or will bear raising. I suspect that those who hold the contrary are in a state of "Reverie" from which they are likely, sooner or later, to be rudely "awakened."

"Scientific Salesmanship"

what, precisely, does it mean? Would not "the common sense of salesmanship" convey the same meaning a little more convincingly? Mr. Catlow said some excellent things in his address on the subject at Leicester, but many of them might have been better said in a less pretentious terminology. His division of surface and the same support that the same said in a less pretentious terminology. pretentious terminology. His division of customers into sixteen types, or thereabouts, was obviously most unscientific, for two or three of the fifteen he named, such as men, children, tired, etc., might include most or all of the other types. The attempt to reduce salesmanship to the definiteness and precision of a science is futile, if we use the word science in the strict sense, as Mr. Catlow, who talks of analysis and synthesis, evidently does, and we lose rather than gain in effect by doing so. The "key to the whole question of selling," which Mr. Catlow distributes under four heads, might have been put more cogently into a single sentence: "Introduce your goods in the most attractive manner possible, with special reference to the tastes and requirements of your customer." We may call this science if we like, but as a matter of fact it is art; the personal equation counts beyond everything else, and the personal equation cannot be stated in the terms of science. The best salesman I ever knew would have said, "The law of sale is all my eye," and it was mainly his eye that did the trick.

The Police Superintendent

who undertakes to "warn" a chemist not to supply preparations that are not subject to legal restriction is guilty of an impertinence, and ought to be told so. No doubt the powers conferred upon the police by some recent legislation are enough to turn their heads, and a little allowance may be made for a young constable who exceeds his duty through excess of zeal, but a superintendent ought to know better. The worst of it is that any resentment of such impertinence as this on the part of the individual pharmacist is likely to react injuriously upon him, the legitimate powers of the police giving them opportunities of annoyance which, though it may be quite uncalled for, is not, strictly speaking, an excess of duty. The local association of the Barnsley district ought to let the Bench know precisely what the duties of the police are in this regard, and where they end. I am not, of course, defending the supply of laudanum in such cases, or objecting to a non-official intimation that such supply is being abused, but a "warning not to supply" is another matter.

My "Bull"

about one-sided reciprocity has, I see, been changed in the press to a bill. My first thought was to call it an Irishism, but really there is little or no reason to debit the Irish with a peculiar liability to these ludicrously self-contradictory expressions, and the term "Irish bull" is comparatively of recent invention. A bull of the verbal type was originally a ludicrous jest. Taylor, the Elizabethan "Water Poet," speaks of "Clinches, Bulls, Quirkes, Yerkes, Quips and Jerkes." Selden and Milton, however, both use the word as we do now, Milton with a characteristic gibe at "Pope's Bulls." Pope, in one of his letters, confesses to having committed "what the English call a bull," meaning a contradictory expression of which the sense is nevertheless plain. Miss Edgeworth, somewhat unpatriotically, less plain. Miss Edgeworth, somewhat unpatriotically, accepted the bull as Irish, and, indeed, wrote an essay on "Irish Bulls." It was a Ewell man who, in answer to my question whether a certain man lived in the village, said, "Oh, yes; he lives here, but he's dead"; and a sister of my own once told me that her dog had started a hare in the home-close, but, unfortunately, did not see it till it was out of sight.

Your Correspondent "Ph.C."

darkens instead of developing his case. The changes that take place in the meanings of words in common use are quite irrelevant to the case of a statutory title originally designed for men who by subsequent legislation are forbidden to use it. There would be no anomaly in the bestowal of such a title as Master in Pharmacy upon men who had specially qualified for it, and nobody who had not so qualified would wish to share it with them. The illogicality of the present state of things has been demonstrated over and over again, and, indeed, requires no demonstration. The change advocated would redound to the credit of the Society by doing away with the anomaly, and by raising the face value of its qualification, as well as by empowering it to bestow a title of real distinction upon such of its members as deserved it.

Buckthorn,

which Gerard calls Ram or Hart's Thorn, is, says Quincy, so well known that its berries need no description. Alleyne, on the contrary, says that "few are well acquainted with them" (the berries), and that, in consequence, they are much adulterated. He warns his readers against buying the juice, counselling them to press their own. The genuine ones he describes as of large size, having four seeds, and a green juice. No doubt he was nearer the truth than Quincy, for, speaking generally, the buckthorn is not very common in England. I remember to have seen only one specimen growing wild all through my boyhood in the Midlands. There used to be a superstition that the Crown of Thorns was made of buckthorn. I don't know whether this was the reason, but as children we used to be rather shy of this tree, which grew on a somewhat barren hillside. It was not because we had the berries given to us as physic, for we used buckthorn only for dogs, though the syrup used anciently to be prescribed for children. Quincy very properly deprecates this practice, and Alleyne speaks as if the syrup in his time was rarely used officially. It remained in the London Pharmacopæia, however, to the end, and was resumed in the B.P. of 1867.

The Suffix-or

can only be used in English when it represents some Latin or French termination, which is not the case with the suggested "chemor" as a name for a consulting or analytical chemist. The suffix ist, in the contrary, may be used in words designating "a person who practises some art or method," etc., "originally expressed by a Greek word in ia." "Chemist," therefore, is a regular and legitimate formation, "chemor" is barbarous and a bastard.

INDICATIONS that Russia is about to speed up the output of oil from the Baku oilfields (states "The Morning Post") are given by a large order for new drilling machinery which has been given to a British firm.

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RANDALL & WILSON, LTD.

Wholesale Druggists, SOUTHAMPTON.

Established 1792.

Assessments on Successors in Business THE view of orthodox writers on political economy that

our income-tax is in theory an ideally fair impost is not likely to command much adherence from the general body of taxpayers while the law imposing the tax has so many elements of difficulty in its practical application. Take the ordinary assessment of a business, trade or occupation. This is made on the basis of the average profits of the three years preceding the commencement of the tax year for which the assessment is made, and the provision must be said to work equitably in the case of a business continuing its normal course without interruption for more than three years. The incidence of the tax is adjusted as to obviate a particularly crushing burden at any period of the business. In the case, however, of traders who have not been in the business for the whole period of three years the rule as to assessment on the average of the previous three years is liable at times to work injustice, the remedy for which is not so complete or clear as it might well be. Where the business is a new one-that is, has not been in existence for three years—the income for the second year is to be taken as that made in the first, and the income for the third year as the average of the first two years. And anyhow, where the business is a wholly new one, if the taxpayer proves at the end of the year of assessment that his actual profits in

that year fall short of the amount on which he has been assessed, he can claim to have the assessment rectified. This applies where the business is new, and does not necessarily apply to everyone who starts in business. If a person takes over a business which had been conducted by another he may be what is known in income-tax law as a "successor" to the person whom he replaces, and in that case he is liable to be assessed on the three years' average of the profits made by his predecessor in the business. This applies to the case of one who in the ordinary course of things purchases or otherwise acquires the business of another. applies to a change in a partnership, or to the conversion of a private firm into a limited liability company, even if the constituent parts of the company are not identical with those of the original firm. This may work injustice to the new proprietor, and for this injustice the law makes inadequate provision. In the first place, there may be a legal succession to a business so as to involve liability to assessment on the average profits of the three previous years even where a part of the business was discontinued by the new proprietor; and, indeed, one of the unsatisfactory features of the whole legal position lies in the difficulty of saying whether in a particular instance the business is a new one or the old one continued. If it is held to be a succession to the old one, the law recognises that circumstances may make it unfair that the new proprietor should be assessed on the three years' average of his predecessor, and provides a mode of relief which the numerous changes in trading concerns and the fluctuations in trading profits have recently brought into public prominence. It is laid down that a successor may obtain relief if his profits fall short from some specific cause arising since he took over the business or by reason of his taking it over. He may in such a case at the end of the first, second or third years after the succession claim to be assessed on the results of his own trading, and not on the average profits of his predecessor. If he wishes to have this done he must make application to that effect to the Income Tax Commissioners for his district within three months after the end of the year of assessment. The law gives no definition of a "specific cause" such as would entitle to relief. A judge of the High Court once said that it should be "something unusual, exceptional, extraordinary." It has been held that an extraordinary depression in the particular trade carried on would be such a cause as to entitle to relief. Perhaps the instance most likely to occur in practice would be where a partner who has a personal clientèle withdraws from a partnership. In the case of any serious falling-off in the profits of a new proprietor the obvious intention of the Act is that relief should be given, although this is imperfectly conveyed by the words used.

"The Old are Better"

New remedies always attract the attention of the pharmacist as well as the physician, the former because of the latter. It is some relief to find so eminent an authority as Sir Dyce Duckworth putting in a good word for old remedies under "Notes on the Value and Employment of Some Remedies now much forgotten or ignored," in St. Bartholomew's Hospital Reports (Vol. LV., 1922). He begins by putting in a kindly word for empiricism, and points out that the absence of hurry in issuing the results of observance had much to commend it. "The best of them manifested distinct clinical acumen," that is in speaking of the empiricists. He goes on to say on certain

drugs, "Their practical virtues have seldom issued from studies in the pharmacological laboratory. They largely depend on accurate and skilled pharmacy, which secures the best drugs, and their standardisation for purity and strength." It is probable that over-refinement has taken something from drugs which once was present-a point, it may be noted, that was mentioned at the British Pharmaceutical Conference at Nottingham. "Modern pharmacy," he says, "has reached a high and estimable standard. I could wish that the pharmacists of to-day were less plagued and engaged in providing the too numerous productions of some manufacturers whose advertisements distract the public, and, not seldom, some of our brethren." At the risk of appearing to be regarded as "setting back the clock," he ventures to put forth excellent reminders of the value of some very common drugs which have fallen into comparative disuse for the purpose for which they were employed in other days. Arsenic, he says, is insufficiently employed; it was used with mercury in Donovan's solution. He says, "I am not yet satisfied that the ultimate results of salvarsan will surpass those obtained by Jonathan Hutchinson's two-years' course of grey powder or mercurial pill. Time alone will tell in this matter." On mercury, he adds, in cases of rheumatic fever it is well to employ it before salicylate treatment has begun. One-grain doses of calomel with compound rhubarb pill is often serviceable, and, he goes on, "Many substitutes have been tried, but are powerless to produce the same effects of disinfection in the alimentary tract." Yellow oxide of mercury ointment and Warburg's tincture come in for a meed of praise, the latter he calls "a supreme instance of polypharmacy as a successful remedy." In cinchona, he prefers the liquid extract and Husham's compound tincture because they contain all the alkaloids of the drugs. In some cases he would vary the hypodermic method of morphine with small doses of liquor opii sedativus. Turpentine he thinks, so far as its styptic properties are concerned, has dropped out of use, yet he says, "It is probably a safer, and certainly a readier, remedy than adrenalin for internal hæmorrhage that cannot be reached locally." He is sorry musk has been dropped out of the British Pharmacopæia, and praises it highly in failing cardiac power in acute diseases. He recalls Sir James Goodhart's faith in musk. This physician has been known to give 40 grains for a dose, expensive in those days, but almost prohibitive now. Bromide of ammonium, borax and sodium bicarbonate are extolled, but these remedies are still popular to-day. Sarsaparilla has become to the modern physician almost a name only, and is seldom prescribed, but our author praises it, though he quotes the opinion of his former chief, Professor Syme, that the drug had no greater value than so much hay. He, himself, says, "Despite its displacement from the Pharmacopæia, it is to be found in every worthy pharmacy," which is probably right. Valerian, camphor, asafetida and guaiacum receive from him good recommendation, though they are steadily going out of use. Camphor is used hypodermically in oil; it received a fillip during the war, but is now being used less and less. Unguentum cretæ he resurrects as the best local application in erysipelas. There was a time when this ointment was commonly prescribed, but it does not find a place now even in the C. & D. Retail Price List, probably the most complete index of current drugs known. Rhubarb is a favourite now, even as in the old days, but it is certainly news hat rhubarb powder is excellent in the case of bed sores. Gregory's powder, however, is being used less and less by the younger physicians. Poultices and leeching are not now popular; in the latter case only the ophthalmic surgeons

keep up the practice, and these are growing fewer; but Sir Dyce Duckworth has a good word to say for both methods of relief. He calls attention to hot douching in certain conditions of severe headache, which is certainly true. From his clinical experience he speaks in favour of alcohol and wine, which he regards as both food and medicine. Friction with alcohol for the limbs of bedridden patients twice a week is a helpful stimulant, and he suggests eau de Cologne as suitable, but the Treasury has made it a luxury almost prohibitive. The paper is an extremely interesting one to any pharmacist, and with the following words of warning, useful to pharmacists as well as medical men. He concludes: "Let me say, here and now, that, to-day, times are changing, and add seriously that it is for us in our profession to be careful that the changes be not too rapid, either for the sick or for ourselves."

The Sulphur Industry

In our issue of April 1 we dealt with the formidable growth of American competition in sulphur on the European markets, giving particulars of the rapid development of American resources and the grave extent to which the Italian industry was imperilled thereby. developments in market conditions and more up-to-date statistics give ample evidence of the badly crippled position of the Sicilian producers, who prior to the war, had a monopoly in sulphur. There was another increase representing as much as 50 per cent. in the American output for last year, the total amounting to 1,879,150 tons, compared with 1,255,249 tons for 1920, and it is obvious that the American exportable surplus is greater than ever, inasmuch as domestic requirements in 1921 were materially less than those for the previous year. These requirements have varied considerably, having, according to trustworthy estimates, increased from fully a quarter of a million tons per annum in the pre-war years to roughly 1,136,000 tons for the year 1918. In the following year American consumption dropped to well under half-a-million tons, but exceeded again a million tons in 1920, although shrinking last year to about 670,000 tons. During the current year it is very probable that American consumption has been approximating that of two years ago, but even so, and assuming that this year's production is reaching in the neighbourhood of two million tons, this would leave a formidable exportable surplus running into about one million tons. Until the year 1919, or when America entered the export markets on a big scale to the extent of close on a quarter of a million tons (about four times as much as the average for the five previous years), Italy was the largest supplier of consuming countries. America now thus by far ranks first, Italy second, and Japan third. As an exceptionally low-cost producing country on a vast scale, America of course now dominates the world's markets, but the time is perhaps near at hand when something will be done under concerted action between American and Italian interests to check ruinous competition on the American side and bring about some understanding to control and limit marketing, as was already suggested in our issue of April 1. As a matter of fact, advices from Italy have been received that a conference has been arranged between American and Italian producing interests, which is to be held in Europe with the object of finding means to arrive at some compromise for the benefit of the industry generally. The position of the Sicilian industry is as acute as it can be, being badly handicapped by high costs, while inadequate means have already been resorted to with but little success. Wages have been reduced, and a material curtailment of the allocations to mine owners

was agreed upon, while some assistance is being afforded by the Government both in the way of reduced taxation and improved transport facilities. Strenuous efforts are being made to protect the industry, while more up-to-date methods of working are to be introduced in order to save costs. A very large amount of the sulphur produced from all sources is being utilised for the making of sulphuric acid, the needs of this consuming branch being doubtless the greatest in connection with many industries, including the manufacture of paper, matches, explosives, dyes, cements, sheep dip, and the use for various cultivating purposes. Prior to the development of the American industry, large quantities of sulphur were imported by the United States, not only from Italy, but also from Japan, America having until then absorbed nearly half the output of the latter country. In more recent years, American takings from Japan were cut off and a large proportion of her exports has been diverted to some of the British Colonies, especially Australia and India, and also Java. Japan's total exports for some years before the war amounted to on an average about 45,000 tons per annum, but the returns for 1919 and 1920 were much smaller at about 28,000 tons 20,000 tons respectively. During the war-period the Japanese output was more than doubled, having attained well over 110,000 tons. While Italy lost a large portion of her outlet in India in 1920, due to Japanese competition, the latter was later largely eliminated in Australia, which country took much heavier quantities from the United States. Since the United States assumed a commanding position in the industry her detailed exports were as follows (in long tons) :-

Destination	1919	1920	1921	1922 (9 mths.)
France	77,206 41,136 ————————————————————————————————————	105,381 124,301 13,946 317 3,500	55,304 59,487 23,049 4,200	80,749 93,846 48,323 9,812
French Africa	3,200 4,970 6,072 706 28,902 12,424 10,943 9,505 8,985 4,286 3,822 627 466 8,619	2,400 8,860 5,074 15,578 57,721 12,590 ————————————————————————————————————	8,321 7,611 14,897 13,331 6,901 3,335 54,938 5,586 5,514 3,134 20,154	2,200 · 5,235 · 29,268 39,125 12,650 · - 3,003 38,225 3,008 8,550 11,171 6,000 15,385
Total	224,712	477,450	285,762	406,550

"Blood Mixture"

The words "Blood Mixture" are the registered trademark of the Lincoln and Midland Counties Drug Co., Ltd., Lincoln, and cannot be used or applied to any preparation other than Clarke's Blood Mixture made by this company. Clarke's Blood Mixture was first made in 1859 and the trade-mark was registered (No. 3275, Class 3) in 1876, a declaration being made that it had been in use fourteen years before February 14, 1876, the date when the first Trade Marks Act came into force. The mark was subsequently transferred to the present owners, and has since been renewed at the statutory periods. This note is prompted by the fact that in the formulas in The Chemist & Druggist Diary, 1923, for "known, admitted and approved" remedies, there is one to which the title "Blood Mixture" is applied. This is not Clarke's Blood Mixture, the proprietors of which are alone entitled to use this designation.

Pharmaceutical Society Of Ireland

Council Meeting

THE monthly meeting of the Council of the Pharmaceutical Society of Ireland was held at 67 Lower Mount Street, Dublin, on December 12. Mr. A. J. Baines, President of the Society, was in the chair, and the following members of the Council were also present: Mr. D. M. Watson (treasurer), Dr. J. A. Mitchell, and Messrs. John Smith, G. A. McLean Lee, J. Carroll Culbert, Andrew Wilson. M. Ryan, Fred Storey, J. A. Doyle, Victor E. Hanna, F. J. Fitzpatrick, Jas. Michie, and Denis J. Nugent.

LETTERS Apologies for inability to attend were received from Messrs. R. Blair, Cork (Vice-President); W. J. Hardy, Belfast; J. A. Bingham, Belfast; and J. E. Conner, Newry.

Mr. M. Loughnane, Vice-Regal Lodge, wrote transmit-ng copy of a report of Sir John W. Moore on the ting copy of a report of Sir John W. Moore on the examinations held by the Society during the year 1922.

The matter was referred to the Law Committee.

Mr. Chas. E. Digges, M.P.S.I., wrote thanking the Council for appointing him as examiner to conduct the materia medica and botanic section at the Final examination.

PRELIMINARY REGISTRATION

The following submitted certificates from the Intermediate Education Board and were admitted to preliminary registration: Messrs. J. D. Forbes, J. D. MacNeill, R. McCormick, and A. S. Patterson.

CHANGES OF ADDRESS

Communications were received from the following notifying changes of address:-

Thomas J. Barrett, Ph.C., to Sterling's Medical Hall, Rose Inn Street, Kilkenny; Wm. S. Black, Ph.C., to Kevens Medical Hall, Mill Street, Monoghan; J. F. Courtney, Ph.C., to 6 Franquilla Terrace, Harold's Cross Road, Dublin; R. G. McKinstry, Ph.C., to Belmont Pharmacy, 225 Holywood Road, Belfast; J. Maban, Ph.C., to Dnnard, Broughshane, co. Antrim; Geo. Black, R.D. to 89 Grosvenor Road, Belfast; and W. W. G. Taylor, R.D., to The Medical Hall, Markethill.

Mr. A. E. Pepper, Duchess, Alberta, wrote applying for restoration to the Register of Pharmaceutical Chemists. The necessary order was made complying with the request.

RESIGNATION TENDERED

Arising out of the publication of statements in regard to the Society's Preliminary examination, Councillor Culbert wrote complaining of the attack made upon him at the last Council meeting, and tendered his resignation as a member of the Education Committee:

Mr. Wilson said he had never seen the Council in a less favourable light than at the last Council meeting. To his mind the racket that was got up about the publication of that letter was 99 per cent. artificial, Mr. Watson made some sweeping statements with regard to the Northern members. The fact of the matter is that that Education Committee was originated owing to the persistent demand of the North Irish Pharmacists' Asso-ciation, which had been fought for months and months, perhaps years, and was turned down all the time. At last that Committee was appointed, and evidence was called for in order to enable the Committee was called for in order to enable the Committee to form a judgment. The Association took a leading part in obtaining evidence, and as an organisation considered that the evidence supplied was theirs. It happened to form seven-eighths of all the evidence that was submitted to the Committee, so far as he knew. Is it any wonder, then, that the Association should feel that that evidence was to a very great extent theirs? They had been promoting propaganda for years to push on their ideas with regard to education, and was it anything unusual that they should expect the secretary to publish the evidence they had collected. The least agreeable part of the proceedings at the last Council was the sentence:

"If it emanated from a member of the Council it showed no loyalty to the Council . . . but loyalty to somebody else." These are mysterious words, and he did not know what they were intended to mean. So far as he was concerned, he had other loyalties as well as loyalties to the Council—loyalty to the licentiates whose votes sent him there, and loyalty to his ideas. He disagreed also with another sentence: "Mr. Culbert's explanation certainly did not go down with him?"

Mr. Warson: Before I go further into this question of publication, may I ask why Mr. Culbert did not correct the inaccuracies in the document before publication?

Mr. Culbert: Does Mr. Watson refer to a statement became a superior of the correct that the model of the correct that the model of the correct that the model of the correct that the c

he made some time ago in regard to figures supplied to the Registrar?

Mr. Watson: That is one part.
Mr. Culbert: That is the only inaccuracy I know.
The figures were supplied by me. I understand they are not correct, but I was told they had no bearing on the question.

Proceeding, he said it would be within the recollection of older members of the Council that many years ago the Association with which he was connected approached the Council with a proposal to discuss the educational question, and it was turned down. Time passed, the Association sent forward candidate after candidate to the Council, and eventually they got a Committee to discuss the questions that had been turned down. That Committee held meetings spread over a year, and then they were told that the terms of the reference did not include the main thing which everybody knew the Committee had been appointed to discuss. The Committee therefore was "punctured" absolutely, but they got the Council to re-appoint it. However, in the meantime it was entirely due to the people by whom they were sent there to let them know what had happened, and The Chemist and Druggist was a medium for them, as well as for the members of the Council. The information was supplied to the C. & D. for the benefit of the members, and if the truth hurt some people that was not their affair. The question of privilege was simply boomed to try to puncture the appointment of the second Committee. He could not continue to be a member of the Committee, nor possibly of the Council, if Mr. Watson maintained the attitude he had taken up.

Mr. Watson said he was not pressing the point about publication, but the inaccuracy of it. At the last meeting of the Education Committee he (Mr. Watson) raised this question. It was pointed out to Mr. Culbert that his figures were incorrect, and the Registrar read the correct figures. There was an inaccuracy of 200 in a total of 995, and Mr. Culbert said that did not affect the argument, though it altered the 40 per cent. of candidates who went for their examination to over 50 per cent. Another inaccuracy was the statement that no other body accepted their That was not true either. He accepted Mr. Culbert's statement that he was not aware of that, but he admitted that he was aware the other was inaccurate.

Mr. SMITH said whoever gave the report to the Press, he had nothing to do with it. The report was a one-sided one, and he did not think their examination was the miserable pretence that report made it out to be. had talked to their members in Dublin, and they were of one mind that the examination was really a test of a boy's ability and knowledge.

Mr. CULBERT said the point was whether Mr. Watson would accept the statement he made that he considered the report was not privileged and that he had perfect liberty to use it. If Mr. Watson did not accept that he (Mr. Culbert) would know what to do.

Mr. Warson said he did not intend to reply to Mr. Wilson, but he would point out to Mr. Culbert that the defence he put forward for publication now was not the defence he put forward last month, which was that there was no breach of privilege in publication. Mr. Culbert on that occasion said the Committee having ceased to sit he thought he was quite free to publish it, but that very day Mr. Culbert himself was proposing that the Committee sit again. The question of privilege was the essence of the matter, because, as Mr. Smith pointed out, only one side of the case was published.

Mr. Culbert said the Committee having ceased it was

no longer a question of privilege.

Mr. Watson said the Committee never dissolved; it was still in existence, and he objected to the word "reappointed" for that reason. Even on Mr. Calbert's own statement the Committee was to sit again, and that

document would come before it again.

The President said he thought this matter had been very fully discussed now. He was satisfied that Mr. Culbert, and perhaps Mr. Watson too, were taking this matter too much to heart from the personal point of view. He (the President) occupied the position of an outsider in the case, as it were, and he was clearly of the opinion that nothing personal was intended in the whole matter. He was extremely sorry and disappointed to see this letter from Mr. Culbert resigning from this Committee, especially as he was the heart and soul of the Committee.

Mr. Culbert asked if Mr. Watson withdrew all question of veracity, and if all he accused him of was lack

of taste or judgment.

Mr. Watson said he could not withdraw a charge he never made. He never suggested that Mr. Culbert was telling a lie.

Mr. CULBERT said that was all the withdrawal he

wanted.

Dr. MITCHELL asked whether Mr. Culbert withdrew

his resignation.

Mr. Culbert: If the resignation is accepted that is all right. If it is not accepted I don't fall out with you. The PRESIDENT: Then you are on the Committee still.

REPRESENTATION ON THE SENATE

Arising out of the report of the Law Committee, the President mentioned that they applied for representation on the Free State Senate, and were refused on the ground that the representatives of the Royal College of Physicians and the Royal College of Surgeons were quite sufficient to include representation of their Society. Law Committee felt that that was not quite the case, and they got Mr. Meeke to draft a letter in reply. They received an acknowledgment of that letter only, and meanwhile the Senate had been completed, and he was afraid they were out of it altogether. Although they were not directly represented, he thought they had some good friends on it.

MUNICIPAL TRADING

Arising out of the same report, in which mention was made of the proposal of the Belfast Corporation to carry on municipal trading, the President said he was glad to see the action taken by Messrs. Culbert, Hardy and Tate in opposing this matter, and he thought the best thanks, not only of the Council but of all the licentiates, were due to these gentlemen for their action in the matter.

Mr. Culbert said all the trade associations were up in arms against the proposal, which was looked upon as the thin end of the wedge for the nationalisation of industries. He did not think the Corporators themselves were serious about it, however, but that it was really a voice to the gallery in view of the coming elections. It was intended to seek powers to open chemists' shops all over the city. What they really intended to do, he understood, was to open a night pharmacy.

It was decided that Mr. Meeke write a letter of

protest.

SUPPLY OF ERGOT TO NURSES

Arising out of the Committee proceedings also, a letter was read from the Irish Nurses' and Midwives' Union, which stated:

Our Executive Committee has recently had under con-Our Executive Committee has recently had under consideration the matter of the supply of drugs, such as ergot, by chemists to persons requiring it. It appears that some chemists require a written order from nurses and doctors, while others will supply these drugs to persons wearing nurse's uniform. To avoid inconsistencies, my Committee desire to suggest that all nurses requiring such drugs should be required to produce a written order, signed with name and number of their Central Midwives' Board certificate. Any person giving a false number would be liable to prosecution, and this method would prevent abuses. The President said the Law Committee recommended that the Nurses' Union be informed of the law in the matter, and that licentiates be advised through this report in the official organ to observe the law in the sale of ergot and to report any infringements.

OTHER MATTERS

The Registrar reported the death of Mr. John Frackle-

ton, chemist and druggist.

Mr. Storery said deceased was a member of the Society since its inception. He was well known in the North and highly respected, and they regretted his death very

Mr. T. A. Crooks, Ph.C., 4 Spencer Road, London-derry, was elected a member of the Society.

QUESTIONS

The President read the first question as follows:

Has the Registrar a record of (a) public hospitals and institutions needing a dispenser; (b) of qualified dispenser or dispensers attached to each? If not, will the Council take steps to ask for a return from all these institutions giving the particulars required?

The President said the only list the Registrar had was the one that appeared in the Calendar-a list of licentiates holding public appointments. Among these there were several who were dispensers in public institutions. As regards the question of the Council taking steps to ask for a return from all these institutions, he thought that was outside their jurisdiction altogether. These places might be regarded as that of a doctor compounding his own prescriptions. It was not a case of open shop. He did not think they had any power to interfere, and he did not think there was any special need for such

a list.

Mr. Watson said that some years ago they took the matter up with institutions that had not a qualified man, and in some cases they got them to engage a qualified

man.

The PRESIDENT: I think that with regard to the larger institutions in big towns everything is all right.

The President said another question was :-

Will the Council take steps to have aspirin placed on the poison section?

The President said he believed this question was discussed some time ago by the British Society, and it was decided that there was not sufficient justification for placing a drug like this on the schedule. In their own case the usual procedure was to apply to the Royal College of Physicians of Ireland, and they in their turn had to apply to the Privy Council before the drug could be added to the poison list. There was no Privy Council at the moment, and he was not sure what procedure they would eventually have to adopt, but they would have first to go to the College of Physicians, and he did not think they would entertain the request in the case of aspirin.

Where conversation languishes.—Under the title "An Eighth Part to be taken," "The Londoner" discourses in the "Evening News" as follows:—

discourses in the "Evening News" as follows:—
Of the fishmonger—a man of unstained honour: you may trust him to pick you out the best lobster—as of the tobacconist, I could tell you many things. But of the chemist I know nothing: if I were to come face to face with him in the street I should not know him for the chemist. There is reason for this: I live from year's end to year's end without once drinking to my own health out of an eight-ounce phial, without swallowing one of those lifegiving pills. The chemist has nothing to sell me but tooth-brushes. These lie upon his counter: I say "Give me one of those," and he gives me one of those. That way no neighbourly conversation may begin; it does not beseem a man of science, who can read the contracted Latin of a man of science, who can read the contracted Latin of a prescription as easily as I can read the contracted Latin a prescription as easily as I can read the contracted Latin of a mediæval charter, to ask what is the next article. So we are strangers yet. And that is a pity. For I like the warm, aromatic smells of the shop: I could linger there to talk of drugs and potions, of poisons and love-philtres, of herbs gathered under the full moon, of shricking mandrakes

But even tooth brushes are not without their conversational possibilities.

"THE CHEMIST AND DRUGGIST" RETAIL PRICE LIST

COPYRIGHT ACTION IN EDINBURGH

Before Lord Murray, in the First Division, Court of Session, Edinburgh, on December 12, an application for suspension and interdict was made by Morgan Brothers (Publishers), Ltd., proprietors of The Chemist and Druggist, against Alexander Murray, Glasgow.

Mr. W. D. Patrick appeared for the complainers, and Mr. T. Graham Robertson, K.C., with Mr. James Keith, for the respondent.

for the respondent.

Mr. PATRICK: My Lord, Morgan Brothers, the complainers in this case, are the printers, publishers, and proprietors of a newspaper or price list called *The Chemist and Druggist Retail Price List*. Some considerations of the property of the property of the price of the property of the price able time ago, especially in London, there was a great deal of talk about what was supposed to be the extortionate prices charged by chemists. There was no uniformity among chemists as to what they were to charge for any prescription, and consequently this system was evolved, and obtains not only so far as our newspaper is concerned, but with regard to two other publications at least. One person ascertains from all the wholesale people what the costs are of a particular drug wholesale, and then he works out upon various different systems what would be the price at which a chemist owning a moderate business should sell, say, one grain or one drachm, or whatever is the normal selling quantity of that drug. Now, all these calculations—I do not care upon what system they are obtained—involve original work. And the complaint which we make in this case is that the respondents, who are the proprietors and publishers of a price list with the same or a similar function—"The Scottish Chemists' Retail Price List "—have copied straight from our price list the prices of certain, at any rate, of the drugs which appear in our price list, and copied them straight into their price list without expending upon the calculation of those price lists any original labour whatever. In short, they pirated our list. The law with regard to all these matters—maps, road books, Kelly's Directories, cable books, and so on, price lists included—is this, that you are entitled to go to such compilations to consider the information which previous compilers have gathered together. The same with histories. But there must be no slavish copying. A subsequent compiler must set about doing for himself the original calculation which the previous compiler did; he must work out the matter independently for himself. These being the circumstances, the complainers brought this action of suspension and interdict :-

plainers brought this action of suspension and interdict:—
May it therefore please your Lordships to suspend the proceedings complained of and to interdict, prohibit and discharge the respondent from printing or otherwise multiplying, and also from publishing, issuing, or circulating or selling and exposing to sale the issue of date July 1922 and issues subsequent thereto of a book or catalogue or price list titled "The Scottish Chemists' Retail Price List." being a monthly list showing what an average chemist should charge for goods to cover overhead expense and show a reasonable competitive profit, which issues contain entries of drugs, chemicals for the retail trade, pharmaceutical preparations, used in prescriptions, surgical dressings, and photographic goods with the relative prices of same which have been copied from The Chemist and Druggist Retail Price List, the copyright of which belongs to the complainers as proprietors thereof, or any books or catalogues or price lists containing prices copied from those in the said The Chemist and Druggist Retail Price List, or only colourably altered from those in the said price list, and only colourably altered from those in the said price list, and to grant interim interdict.

The action is, secondly, against subsequent issues of their catalogues which contained pirated entries, but would not affect any issues which did not contain pirated entries at all. And the action is lastly against any books or catalogues which contain pirated entries. Well, now, I will read the statement of facts for the complainers. Statement 1 says :—

The complainers are the proprietors and publishers of The Chemist and Druggist newspaper and other publications, and in connection with said newspaper they issue a Retail Price List called The Chemist and Druggist Retail Price List. It contains a list of drugs, and so on, with the relative prices of various quantities based on definite costing principles. The Price List was first issued in January 1922 as a part of The Chemist and Druggist newspaper, and is issued four times a year. It is not supplied separately from The Chemist and Druggist newspaper. newspaper.

Then Statement 2 says :--

Then Statement 2 says:—

In connection with the preparation of their said Price List the complainers employ the services of skilled assistants with the view of having the List and the calculations of the prices as complete and correct as possible. Much labour, time and expense is bestowed on the preparation of the List, which has proved of great value to retail chemists and druggists. Much time, labour, expense and original thought has been bestowed by or on behalf of the complainers in the conception and working out of their costing system. The costing system has been worked out to yield an average profit at definite percentages by a method which is only known to the complainers and their employees. It is designed for a medium mixed retail business, and the rates vary with the quantity of a drug sold at a single sale and the prospective frequency of sale of any particular drug in a medium-sized business, and to assist in carrying out the pricing a series of ready reckoners based on the complainers' original system has been drawn up. The cost prices given are the average of the chief wholesale drug houses, but as liquids are bought by weight and sold by measure allowances have been made according to the specific gravity of the liquids, so as to arrive at the true cost, from which the retail selling price can be reckoned. While standard wholesale prices have been used as the starting point for calculating the retail prices, the List takes into account the fact that individual ehemists may have paid more for their chemicals than these standard wholesale prices, and a method is provided whereby such chemist may calculate for himself the price at which he ought to sell such chemicals so as to produce a profit at or about the definite percentage. A method is also provided for ealculating prices of quantities not quoted in the List. There is also a rounding off on definite lines in the case of fractional sums. A copy of said Price List of date April 8, 1922, is produced and referred to. The complainers are owners of In connection with the preparation of their said Price

Then Answer 2, my Lord, says:

Denied that the costing system employed by the complainers is worked out by a method known only to them and their employees. The system is well known in the trade, is employed by the National Health Insurance Comtrade, is employed by the National Health Insurance Commissioners for the purpose of fixing the prices of drugs, medicines and appliances dispensed under the National Insurance (Health) Acts, and was used by the respondent as hereafter mentioned, long before the complainers first issued The Chemist and Druggist Retail Price List, and the issue of the said List, dated April 8, 1922, is referred to.

My Lord, upon that question of fact we absolutely deny that, and it certainly is not used by the National Health Insurance people. That issue seems to me to have nothing to do with this case, for this reason. Suppose we have a system of working out the prices we put in this Price List, suppose there is anything proprietary about that system, and suppose the defenders should have knowledge of that system, still, although they have knowledge of that system, if we by that system do a sum by which we arrive at the price that one grain of hyoscyamine is to be sold at, that does not mean that the respondent can go and take that out of my book and publish it. If the system is not proprietary, they can consult our Price List, but they must do the sum for themselves.

Statement 3 says :-

The respondent edits a book, or catalogue, or price list ealled "The Scottish Chemists' Retail Price List," which is issued monthly, which bears to be printed and published for the Scottish Chemists' Association, at 255 Albert Road, Pollokshields, Glasgow, but of which publication the respondent is believed to be the proprietor. Copies of the issues of November 1921 and of June and July 1922 are produced and referred to.

Answer 3 says :—

Admitted that the respondent is the proprietor and editor of "The Scottish Chemists' Retail Price List," and that this list is issued monthly. Quoud ultra denied. Explained that this list was first published in a very much abbreviated form on August 12, 1914—

I also do not see what this has got to do with the case at all; it may be stupidity on my part—

by the council of the Glasgow and West of Scotland Chemists' Association, upon the suggestion of the respondent, who was then honorary sccretary to the trade committee of the said council.

After further particulars the answer proceeded :-

In the month of October, 1920, the respondent acquired from the said Association the whole property rights in the said List. From that date the said List has continued to be issued monthly by the respondent as proprietor and editor. In the month of December 1921 a large amount of additional matter was published in the said list, and the said list was issued in an amended form, showing the prices for different quantities of the various drugs used in dispensing medicines in columnar form. A copy of the said list for December 1921 is produced and referred to. The first number of the complainer's price list was issued on January 7, 1922, in a form similar to that of the respondent's list of December 1921. Further additional matter was included by the respondent in his list of March 1922. From March to June 1922, the respondent was collating a large quantity of new material, which appeared in the issue of July 1922. Further issues appeared for the months of August, September, October and November 1922, which contained fresh alterations and additions. Copies of the issues from July to November 1922 are produced and referred to. Practically from the outset of the compilations of the said lists the bulk of the work in connection therewith has been the work of the respondent, although prior to November 1913 he was assisted in the revision of the said List first by certain members of the trade committee of the said Association, and latterly by the President and secretary of the said Association. The idea of the said list originated with the respondent, and he has, from time to time, expended upon the preparation of the numerous issues thereof a vast amount of original thought, time, labour and money, and engaged in a large quantity of arithmetical and scientific calculation. He has also written at different times to the makers of a large number of proprietary drugs and other articles for information as to their prices, and specific gravities of the liquids and other particulars, all of which information has been reproduc

We say that our list is entirely original and something which is entirely new. We say we never based a single particle of ours, or a single method of calculation, upon the London Chemists' Costing System, nor the Scottish list; and the fact that our prices come out in every instance entirely different shows that.

LORD MURRAY: Is your motion going to be to pass the

note and grant interim interdict?

Mr. Patrick: Yes. Statement 4 says:-

The complainers have recently discovered and aver that the respondent in the issues of his publication has introduced entries which are copies of the entries in *The Chemist and Druggist Retail Price List*, the copyright of which is the property of the complainers. A large number of the articles which appear in the price list belonging to the complainers, issued on April 8, 1922, have been incorporated in the said price list edited by the respondent. The entries of these articles—at least, so far as regards the calculations and statement of the prices, are not the product of the independent labour, skill or experience of the respondent, and the respondent has unwarrantably availed himself of the complainers' labour, skill and experience and original thought. Complainers said price list has thus been extensively pirated by the respondent, to the serious loss, injury and damage of the complainers.

Their answer is :-

Admitted that in the respondent's price list for the month of July 1922 there appeared certain prices taken from the complainers' price list. This was not known to the respondent at the time, and was only discovered by him some considerable time afterwards as the result of investigations made in consequence of the present proceedings

-a most remarkable explanation.

The error arose through one of the respondent's assistants sending to the printer, along with a quantity of manuscript material, a copy of the complainers' price list, in order that the spelling of a number of the technical names might be checked and error avoided. By mistake a number of the complainers' prices were set up opposite the names in question, and this was not discovered when the July price list was issued.

Now, my Lord, two remarkable features spring from the one statement there. The first is that these prices of the four hundred odd entries and the entries themselves, that is to say, the particular drugs, had never appeared in the respondent's price list before. They were new in the respondent's list, and these four hundred odd prices correspond verbatim with the prices which we gave; and more than that, not only did this poor printer go and take part from the manuscript and part set up the prices from ours, but he also made a set of most remarkable errors in setting them up. That is to say, he did not even set them up quite correctly, but he made a mistake with regard to certain small matters and set them up wrongly. The story, as a matter of fact, won't bear examination for an instant, the coincidences are so perfectly remarkable. They go on,

Explained that the respondent's price list for July 1922 contained over 10,000 names of drugs and other articles, of which the entries complained of formed a very incon-

siderable proportion.

With regard to the 10,000 names of drugs, besides that, the list contains everything from patent medicines to perambulators. We are not complaining of the perambulator entries or the patent medicines. What we say is, out of a comparatively small number of entries respondent pirated 400 odd entries. The 10,000 figure is not a reliable figure for comparison. As my friend challenges that remark, I had better deal with it just now. If you go to the top one, take, for instance, July 1922, you find Gibson's Foot-Rot Ointment, that is not a matter for calculation at all, that is a patent medicine. Then Oakey's Knife Polish and Oakey's Silver Soap—the list is full of things that have nothing to do with drugs at all. Now, may I go on:—

The respondent believes that in the course of the revisions which have taken place in the preparation of the subsequent monthly issues, the entries complained of have been entirely eliminated.

We have taken the trouble to check those subsequent issues, and may I give your Lordship the results? The July issue was the one which contained 400 odd entries. No doubt they have been eliminating them bit by bit. The August list contains 74. The September list contains 43. The October list contains 13; and the November List, which is the last one complained of, contains 11. With regard to the last November one, they say they have got it down to 2, but that is not so.

LORD MURRAY: Do I understand the position to be this: July is started with an addition of 420 new articles in regard to which the prices corresponded with those of

yours?

Mr. Patrick: Yes.

LORD MURRAY: And that while the 420 articles still remain in Mr. Murray's subsequent issues, the prices

have been so altered as not to conform to them, so that there are only 11 or 2 which conform in last month's publication. That is what you mean. You do not mean the articles themselves have disappeared?

MR. PATRICK: In some cases they have actually been taken out, but may I say with regard to those later things I would never maintain that in a publication such as this 11 articles corresponding would entitle one to say there was a breach of interdict. I do not complain of there was a breach of interder. I do not complain of this last entry of the November one, nor would any Court ever hold that. No Court would ever hold that the appearance of 11 entries, shall I say, out of probably 4,000 drugs, was a breach of interdict. They are quite right in saying they have been eliminating these entries one by one. Then they say,

If any such entries still remain undiscovered by the respondent, they are so few in number and so unimportant

as to be negligible.

I think that is probably correct.

Explained that the said entries were for the purpose of the respondent's price list inaccurate, and if they had not been corrected would have caused inconvenience and pre-judice to the respondent and his customers.

That is a remarkable averment in view of the attitude

taken up in the correspondence.

The bulk of the errors were discovered by the respondent in the course of preparing the August price list, though the source of error was not appreciated by him at the time.

May I deal with that averment and give some figures. He says "In the course of preparing the August Price List," but before this August List was prepared we had challenged him that he had pirated the July List.

MR. KEITH: That is not true.

MR. PATRICK: You were then in course of preparing and issuing the August price list, and he says the source of the error was not appreciated by him at the time, but it seems a most extraordinary matter to me that he could not appreciate the source of the error when he got that challenge from us.

LORD MURRAY: Tell me if this is how the thing stands:
If there has been a reducing of the original offence complained of, and it now becomes negligible, what is your purpose in these proceedings? Why are you asking me to

deal with this?

MR. PATRICK: My purpose in these proceedings is this, as I shall show your Lordship upon the correspondence. LORD MURRAY: Is it expenses or something in payment?

MR. PATRICK: I want two things. I want an interdict against that July issue being multiplied. My friend says it has gone out of print. But what I particularly want is an interdict, such as has been granted in the previous cases, as I shall show your Lordship, where there has been piracy, from him copying my prices in the future, publishing papers which contain prices copied straight from

LORD MURRAY: And with regard to that you say you have averments which found the case of reasonable appre-

hension of repetition of the offence.

MR. PATRICK: So far as I can see, I do not know that that is necessary, and really while I am concerned to get Court again if he repeated the offence. That is all it comes to. If he says "I am perfectly innocent and I will never do it again," then there would never be any breach of interdict, but if he again copied any substantial number of entries from my list, then I would have to come to the Court with a fresh notice of suppositions and interdict. I am really not concerned even with the July one so long as I get some assurance that it will not be repeated in the future. I do not know that the question of whether he knows this present system and so on, and so forth, and who devised this particular method of calculation, and so on, is relevant.

MR. KEITH: It is merely to show my bona fides. It is merely to show that I was doing this long before my

friend came and interfered with me.

MR. PATRICK: It was to show that you were working a system, but not, I hope, to show that you were pirating. MR. KEITH: The only system that was on the market.
MR. PATRICK: May I say with regard to my friend's averments about this system, our information is this, that my friend in collaboration with two other gentlemen, a. Mr. Skinner and a Mr. Weiss, had been working upon this matter, and so far as we are informed, the man is the theorist of these people, the man who did the work and the man who has all along stuck to the schedules upon which this business was based, was this man Skinner, who has now quarelled with my friend's client. Our system is based upon none of these calculations, nor do we employ the same calculations, nor do we produce the same results. But as I say, that is really apart from the subject matter. The only matter appears to me to be (1) Am I to get some form of interdict in the future? and (2) Am I to get compensation?

LORD MURRAY: I suppose the position is that each

month's issue superscdes the preceding one, just like a

new directory.

Mr. Patrick: That is my friend's averment.

LORD MURRAY: Have you got any real objection to the

Dack number which is the main contention?

MR. PATRICK: I do not think I have, but I can conceive if I were prepared to be exigent I could have quite a good case upon that.

MR. KEITH: No one wants the July catalogue; they

want the last one.

MR. PATRICK: My position is this, supposing he issues a December catalogue and says, "For the prices of drugs A. to Z. see prices in July," namely, the pirated entries, what am I to say? He has admittedly taken a lot of these drugs out altogether. Well, we may put a note there "For prices 1 to 25, or 1 to 33, see July catalogue." There again it would be a repetition of the piracy, and it would depend altogether on the substantiality of the offence whether there was broady of intertiality of the offence whether there was breach of inter-dict or not. May I now show your Lordship where there has been piracy (quoting pleadings).

has been piracy (quoting pleadings).

The said piracy has been accomplished by the respondent copying verbatim from the price list belonging to the complainers a great number of the entries relative to articles in that price list, together with a note of the prices for various quantities of the articles. In the respondent's issue of date July 1922 and in his subsequent lists there appears some 420 drugs which had not been included in any of his previous issues, and the names and prices of which he copied from the complainers' issue of April 8, 1922. The prices which the respondent usually quotes in his issue are not calculated on the same system as are those quoted by the complainers, and seldom or never have corresponded before July 1922. By way of illustration only, there is produced herewith a list of some 93 drugs out of some 317 drugs, the initial capital letter of which is "A," quoted by the respondent in his issue of July 1922. These 93 had not previously appeared in the respondent's issues, and the prices he quotes are copied from the complainers' said April issue without any original calculation or work on his part.

Now, my Lord, that is about a third of his entries

Now, my Lord, that is about a third of his entries under the letter A."

Further, in copying the said 420 drugs and prices, the Further, in copying the said 420 drugs and prices, and respondent has made certain copying errors. In the complainers' list there is no column for 20-grain quantities. Where drugs are normally used in that quantity, the price is put in the 1-grain column, and the fact that that is put in the 1-grain column, and the fact that that price is for a quantity of 20 grains is denoted by an asterisk. The respondent has omitted to notice the function of the asterisk, and has copied the complainers' price for 20 grains as being for 1 grain.

It was the printer, according to their story, who made

the mistake about this asterisk.

LORD MURRAY: There would have been a difference in price according as to whether you were selling by quantity or by units.

MR. PATRICK: It would not be exactly a proportionate deduction, because all of these systems, I understand, take this into account, the amount sold, the bother of making up, the frequency of the occurrence of sale—it is quite an elaborate system of costing.

LORD MURRAY: The averment is that he not only stole,

but spoilt in the stealing!

Mr. Patrick: Yes. Then Statement 5 goes on,

By way of illustration, a list of some nine drugs is produced. There are certain other copying errors. By way

of illustration, the prices for the drug mangan. oxid. nig. gran. are copied from complainers' said list, but are placed in the wrong columns. Furtiler, a number of drugs and relative prices were copied by the respondent from the complainers' list, which identical drugs were already in the previous issues of the respondent's, but under different names and prices. Examples of this are:—(1) Aqua pulegii ang., already in the respondent's list as aqua menth. pulegii.; (2) bismuthi oxychlor. puriss., already quoted as bismuth chloride; and (3) liq. papain. et iridin B.P.C., already quoted as liq. papain. et iridin. Further, a few errors appearing in the complainers' April list have been copied verbatim by the respondent. For example, the entry elixir sennæ fruct. copied by the respondent should not have appeared in the complainers' list. It is the identical drug which also appears in the complainers' list as elixir sennæ legum. The respondent has taken advantage of the labour, skill, also appears in the complainers' list as elixir sennæ legum. The respondent has taken advantage of the labour, skill, experience and original thought of the complainers in compiling their price list, as is evidenced from the facts before set forth. The course of action of the respondent has been most wrongful, and has been deliberately pursued by him with the view of pirating the said price list and calculations of prices, and has resulted in loss, injury and damage to the complainers. All claims of damages competent to the complainer in the circumstances are reserved.

Their answer is,

Denied under reference to the preceding answer and to the respective price lists of the complainers and the respondent. Of the 93 sample drugs selected by the complainers all but seven differ in material details as to prices in the August price list of the respondent.

We are not agreed upon that, but I agree that they are trying to put their list right as rapidly as they can.

A certain correspondence between the prices in the complainers' list and those in the respondent's list is inevitable in the case of certain drugs from time to time. As regards the list of nine drugs referred to, these had disappeared or an independent price had been entered for these in the respondent's list for August, except in the case of ext.' sumbul, a corrected price for which appears in the September list, and dionin, the price of which is corrected in the November list. The other resemblances referred to also disappear in the respondent's lists subsequent to the month of July 1922, or where they still subsist, are inevitable. inevitable.

Statement 6 is:

The complainers have called on the respondent to cease printing, publishing, and/or issuing copies of his issues of July 1922 and subsequent issues containing entries pirated by him from complainers' lists, and to cease pirating from complainers' lists in future, but he refuses to do so.

Answer 6 is:

The respondent has not, nor has ever had, any intention of pirating entries from the complainers' publication, a procedure which can be of no advantage or profit to the respondent, as explained in Answer 4. Apart from the mistake made in the July issue of the respondent's price list, there has never been any correspondence originating from the respondent's side, between the respective price lists of the complainers and the respondent.

Our pleas are :-

1. The complainers' said price list, being the produce of their labour, skill, experience and original thought, and the complainers being owners of the copyright therein, the respondent is not entitled to use and appropriate the same or any material parts thereof for his own benefit and to the damage of the complainers.

2. The respondent having printed, published, issued and circulated the price list complained of, having incorporated therein entries abstracted by him from the complainers' price list without their consent and in violation of their proprietary rights, they are entitled to interdict as craved.

The respondent's plea is:

1. The action is incompetent in so far as it seeks interdict in respect of any issue other than the current issue of the price list complained of.

My Lord, in all the actions of interdict which I have been able to find, where the question was piracy such as this, the interdict has been just in the form here given, against multiplying the last piracy copied. If there was no more multiplication or circulation by the respondents,

or no more selling by the respondents of the pirated copy, then there could be no breach of the interdict; but the interdict was granted against repetition of the offence in the future. It may be that it is inexpedient in this particular case to grant it, but it cannot be

LORD MURRAY: The only questions between you are the two points you have mentioned-Have you set forth 2 case which, in view of the admissions upon the record, would warrant the granting of any interdict at all? and

MR. PATRICK: With regard to the correspondence, I came into court, as I will show your Lordship when I read the correspondence, with an absolute denial by the respondent that there was any piracy. Therefore I have no reason to argue that there is the likelihood of the piracy occurring again, because I came into court with a blank denial that there was any piracy. These answers, in view of the fact that they set up a case of bona fides, might in the Court of Session lead to having to put on averments of a threat of recurrence, but I think the answer to that is that if there has been a substantial piracy, and if that substantial piracy is continued through a period of correspondence lasting from the end of July until this present date, and if for the first time when answers are lodged, no doubt upon the advice of learned counsel—because it was not upon the advice of their law agents—they also maintain a position of no piracy no doubt upon the advice of learned counsel the question of bona fides was raised, then I submit there is a good case. That there is an argument of no piracy adhered to for five months raises a good case for the granting of an interdict against piracy in the future. Upon expenses, my argument would be the same. I come into court after five months' correspondence with an absolute denial of piracy.

LORD MURRAY: The fact you mentioned just now might have a material bearing on the question of costs. MR. PATRICK: I was going to say that upon costs my

argument is exactly the same.

Lord Murray: Can I look at that correspondence just now?

MR. PATRICK: I should think so upon the question of MR. GRAHAM ROBERTSON: We have no objection to that

being done. I think the letters are accurate.

MR. PATRICK: This is a copy, and I would ask your Lordship to look at a few of the letters to justify me coming into the court and to justify my demand for an interdict.

LORD MURRAY: Since the close of this correspondence has there been any suggestion that the situation might be

ended by an undertaking?

Mr. Patrick: None. I should think the answer was this, that this position was never adumbrated by the respondent in this case until it became necessary to lodge his answers.

Mr. Keith: We suggested a meeting before the note was served at all, in order that the whole matter might

be explained, which you would not agree to.

Mr. Patrick: When was that? Mr. Keith: November 22.

Mr. Patrick: I am not aware of that.

Lord Murray: I am far from desiring not to be of assistance to parties if I can, but I have to consider whether on an open record I would have material for which is a superior of the state of the state

giving a satisfactory decision upon either of these topics.

MR. PATRICK: I think myself in this case it would be very unfortunate if we carried this litigation further, to the extent of fighting in the Outer House upon printed record, with adjustments, and so on. The matter seems record, with adjustments, and so on. The matter seems to me to be capable of adjustment, and I should think in these circumstances there would be nothing to fight about. If we were reasonable beings at all we should stop it. The first letter is the letter of July 31, our letter of complaint, where we say we have been looking through their July List. We say that we have found a great number of entries which constitute a serious infringement of copyright.

There are several very glaring examples of copying in your List which, in our opinion, will enable us amply to

prove our contention that you have infringed the copyright of the C. & D. List. Before taking further action in the matter, however, we think it right to give you an opportunity of making any explanation you may desire.

The answer to that was by the present respondent, "I am somewhat surprised to note the suggestions you make therein." Then he goes into the history of the make therein." Then he Scottish List. He says:

The study of any price list is apt to lead one to assume that the pricing has been culled from their publication. We can assure you that we are extremely sorry that you should have written to us in this strain, as we have no desire to infringe on any matter or costing method used by any of our contemporaries. The Scottish List has all along been compiled from information collated by ourselves, and the compiled from information collated by ourselves, and the method of pricing is in accordance with the principles which were adopted in 1914. Our August issue will be out fo-morrow, and we shall have much pleasure in sending you a copy.

Mr. Murray never sent that copy in order that we might check it. On August 9 we wrote:

We regret that your reply, dated August 3, to our letter of July 31 is unsatisfactory. We have ample evidence that you have seriously infringed our copyright in *The Chemist and Druggist Retail Price List*, and we expect you to not continue to infringe our copyright. Unless you do this within 14 days we shall proceed further in the

We heard nothing further until September, and then our London correspondents wrote to Mr. Murray again and reiterated the previous correspondence, and stated that they had gone into the matter and were satisfied there had been an infringement. That letter states:

there had been an infringement. That letter states:

Before actually instituting proceedings we are therefore writing to ask you whether you are prepared to comply with the following terms, namely, to publish an apology in a form to be prepared by us and at your expense in our clients' publications, in the "Scottish Chemists' Retail Price List," and in such other newspapers as our clients may require and to give us a written undertaking not to issue to any person any further copy of the "Scottish Chemists' Retail Price List" for July, but to get in and withdraw from circulation all copies of the "Scottish Chemists' Retail Price List" for July 1922.

Then we draw their attention at the top of page 2 to the following:

In your letter of August 3, addressed to our client, the Editor of The Chemist and Druggist, you stated that your August issue would be out to-morrow, and that you would August issue would be out to-morrow, and that you would have much pleasure in sending our clients a copy. We are instructed that you did not do this, and we therefore have to request that a copy of this issue be at once forwarded to us, and, if it be found that the August issue of the "Scottish Chemists' Retail Price List" also infringes our clients' copyright, that you shall publish a similar apology with regard to the August issue and give similar undertabling.

This is the August issue which he promised to send us a copy of as early as July 30. By September 15 we had not received it. He tells us now orally that he did send that copy in a wrapper, but most unfortunately the postoffice made one of those occasional slips they are supposed to make, and it never was received by us.

Lord Murray: It is possible it was in your waste-

paper basket.

Mr. PATRICK: It might have been, but it is curious that when challenged six weeks afterwards he did not give that explanation. We challenged him in express terms, and said it had never been sent to us, and his answer was that Mr. Murray had handed the matter to his law agent. We never heard this explanation until it was given in Court here. Well, my Lord, the law agents after considering the matter wrote to our agent on September 22 in these terms:

Our client's Price List has been in existence since 1914, and it has, throughout this period, been compiled by him from information procured and collated by his own exclusive industry. Having been engaged so long at this task, there was no occasion for our client to go to your clients' recently commenced List for information, and he has not, we are instructed, at any time made use of anything which was the result of your clients' industry. As both lists are published for the same end (although serving a different public), and deal with the same commodities, similarity, if not identity of result, is unavoidable.

I do not think I need read more of the correspondence, but that attitude continued right up to the service of this case, as far as I know of. In our letter of September 29 we point out that we have had their explanation, and we quote other arguments in reply. We say:

It is utterly impossible for your clients to have arrived at the same result without copying from our clients' List, more especially as in one or two instances there have been some slight errors made by our clients, and those identical errors have been copied in your clients' list.

The answer to that on behalf of the respondent on October 3 is:

We have nothing to add to what we have said in our previous letters as regards the compilation of our clients' price list, except that your statement that your clients' list has been arrived at on a system of their own which is known to no one else, and it is impossible for anyone to arrive at the same result without copying, is not only baseless, but absurd.

That means to say "We stick to our ground. We have not copied at all, and if there are any prices which appear to be the same they are arrived at because the assistants may have arrived at the same results." We challenged them again on November 9, and asked them if they would reconsider their attitude. We say we will give them sufficient time to communicate with their client and write to us before we institute proceedings. reply to that Weir, Grieve & Jeffrey say on November 14:

You rightly assume that our client will not recede from You rightly assume that our client will not recede from the position taken up in the correspondence, and, if your clients should see fit to put their threats into effect and institute proceedings in Court, our client will counter-claim against them for an injunction and damages in respect that, in compiling their list, they have made use of a copyright costing system, the result of our clients' industry and experience, which he communicated to Mr. Skinner.

That is to say, they threatened to carry the war into our camp. They have not done so yet. My Lord, the position then was that up till the last moment the contention of this respondent was, "I have copied nothing." He said he never discovered this error. It is a most remarkable thing he discovered it within the four days which we gave him to lodge answers, but he never discovered it in the five months which elapsed between our attack upon him and the service of the note. Up to the last moment his position was that he had copied nothing. In those circumstances I submit that copied nothing. In those circumstances I submit that the proceedings we take are fully justified. I would ask your Lordship to grant an interdict against the respondent issuing any book or catalogue or price list containing prices copied from those contained in the Chemist and Druggist Retail Price List, or only colourably altered from those in the said price list. The precedents for that both in England and Scotland go precedents for that both in England and Scotland go back to very early days in this business of copying and using the product of another's skill and industry. I refer to the case of McLean v. Moody (20, Dunlop 1154). The trouble there was that a certain newspaper copies from a list of the imports and exports coming into the Clyde. That list was proprietary in this sense, that certain merchants had obtained from the Crown the exclusive right of examining the Customs list and so obtaining the material. These merchants published a obtaining the material. These merchants published a paper with this list, and the respondent pirated from that paper and published this information in another newspaper. The form of interdict which was granted there—and I may say I have based this interdict in part upon it—was that the respondent was interdicted, prohibited, and discharged from copying from and printing and publishing what was copied either in full or in an abridged or condensed form any of the matters.

Lord MURRAY: Was that a periodical publication?

Mr. Patrick: It was a monthly publication, I think.

In the other case in England it was decided that there should be no more copying, and the form of injunction was to restrain the defender from publishing or selling any catalogue containing matter compiled or written by

the complainer. Something of the same kind appears to have been done in the case of Harpers, Ltd. (20 Rettie, 133), where again there was cribbing from certain circulars containing prices, and interdict there was granted after discussion. Well, my Lord, the matter is in your hands. I can put it no higher. I can simply say, where a man has admittedly pirated in the past, where he has never during five months' correspondence said he was sorry for having done that, and given an undertaking not to do it again, I am entitled to ask for interdict. On the contrary, he has maintained to the last that he has not copied our list, and he says he did not discover it for five months, but during the four days, as I have already said, he did discover it. I therefore say that his bona fides is not sufficiently established to make

it improper for your Lordship to grant this interdict.

LORD MURRAY: The difficulty is that your motion asks for interdict on the one hand and expenses on the other hand, which is rather inconsistent. If I assented to your view and gave interim interdict it would follow I would have to pass the note, and it would follow I could not touch the question of costs.

MR. PATRICK: I think I ask nothing more at this stage than interim interdict.

LORD MURRAY: In that case it would follow that I cannot touch expenses, but I must pass the note.

MR. PATRICK: I think that would be so. 2he matter of expenses would have to be a matter of arrangement.

MR. KETTH: My motion in view of the way the case has developed is that your Lordship should refuse the note on my friend's own admissions. I thought when I came into Court that there would be substantial questions to try, but he really admits that there is no infringement at all now, and, that being so, I say the whole thing is spent and gone, there is no need to pass a note, and your Lordship should refuse the note.

LORD MURRAY: That would mean that he has stated

an irrelevant case.

Mr. Кетти: I think his case as stated was relevant, but it is modified by his admissions now.

The Afternoon Proceedings

After the luncheon adjournment.

Mr. Graham Robertson said: Mr. Patrick is not here yet, but I have had a word with him in the course of the adjournment, and I understand he is agreeable in the circumstances—and errors which appear in the July list having been gradually corrected, I think there is nothing left in that at all—that the note should be refused, there being no apprehension now of there being any possible injury to his clients at all, and there being no ground whatever for granting an interdict against my client from pirating the matter in Mr. Patrick's publication. That being so, I understand that he is agreeable that the note should be refused, my clicit granting an undertaking, which he has all along been willing to grant, an undertaking that he will not pirate the matter. My client's publication was admittedly the first of this kind in the field, and there was no reason for him to look elsewhere for his information, and he has always done that so far as he himself is concerned. It happened that through an error certain entries in the July issue were put into his publication taken from the complainer's publication; and we could have shown your Lordship, had the debate gone on, that that is the only explanation, because the errors are so glaring, and taken from the complainer's publication. We, however, have entirely throughout maintained our bona fides. That is the position. We will grant that undertaking.

LORD MURRAY: Have you agreed with Mr. Patrick the

terms of the undertaking?

MR. GRAHAM ROBERTSON: I have not seen the terms. We shall not pirate from their publication. We will have

to agree to the precise terms.

MR. PATRICK: It appears to me that in view of the answers now made there is no substance left in this case, and therefore it appears to me that the note might be refused, and there remains only the terms of that undertaking. We are agreed that the undertaking should take the form of an undertaking not to pirate in the future.

MR. GRAHAM ROBERTSON: Without admission that we have ever pirated in the past.

MR. PATRICK: There would remain only the expenses of this application. Upon that view your Lordship might

perhaps hear us on expenses.

LORD MURRAY: Would it be more satisfactory for me to deal with that after the terms of the undertaking have been adjusted. Might I be allowed to say that I felt at the conclusion of Mr. Patrick's speech that I anticipated that the good sense of parties would lead to something of this kind. The only question is whether I should deal with the matter of expenses now.

MR. PATRICK: It might be convenient, if it is not otherwise inconvenient to your Lordship, to hear us on

expenses now, as it would save the expense of those parties appearing before your Lordship again.

LORD MURRAY: To shorten matters, I would like to hear what Mr. Robertson has to say. I rather think the onus is upon him.

MR. GRAHAM ROBERTSON: On the correspondence, Mr. Patrick, of course, was met by a denial on our part that there ever was any copying from his publication. Mr. Murray, my client, knew that he was proceeding upon his own calculations, and he thought it was unnecessary to inquire into this matter. He said, "We have not done any wrong at all."

LORD MURRAY: You may assume that I will treat the question on the footing of the bona fides of your client.

Mr. Graham Robertson: That explains the correspondence. It was so impossible for Mr. Murray to think that there was anything wrong. Later in the day he made inquiries from his printers, and the whole matter was discovered. But by that time the note was almost ready for publication. Mr. Lord, observe this: Mr. Patrick comes forward and tells your Lordship that upon an examination of the successive issues he finds that the offending items, which formerly numbered 420, are reduced to 34, and then to 11. That information was in his pressession before the ledged his note at all. November 11. his possession before the lodged his note at all. November 28 is the date of the presentation of the note. If Mr. Patrick had only chosen to look at the numbers of the later issues before he lodged the note he would have seen that there was no case for lodging a note at all. Although I agree that the onus is upon me, because there was an offence committed by the printers' error in July, I think I have discharged the onus to this extent, that the fair result would be that there should be no costs on either side. I ask costs against Mr. Patrick. If not, I think the right order will be no costs due to or by either party, and I submit accordingly.

MR. PATRICK: I may say on the only point which appears to be made against me, with regard to costs, that I need not elaborate the statement that we asked for nothing more than a promise and an apology. We took it that there was no question of mala fides at all. We were met by the reply that there was no pirating at all; no explanation of the wrong was tendered to me at all; no explanation of the wrong was tendered to me at all; on the contrary, there was a denial of the committal of the wrong. It is said, "Oh, you have agreed that there is no ground for your interdict because there has been a steady reduction in the subsequent entries from 420 to now 11. Bit by bit they have come down." I have agreed to no such thing. I have agreed that I should not go on with this interdict, and have settled it on that basis. This is a wrong which, in the absence of explanation, would have entitled me to an interdict against all tion, would have entitled me to an interdict against all the acts there-reprinting, publishing or circulating the July issue. The respondent comes forward and explains that this was through an error, and he is not going to do it in the future. But under no circumstances have I ever admitted that the fact that the pirating in July, less in August, and less in September and October, would prevent my interdict. The point is that, albeit that I knew there were only eleven in November, I had no explanation of these eleven. I might not have been justified in asking interdict quoad the November issue. The respondent says, "There was no mala fides on our part; it was a printers' error. Against August's 74 entries September has 43. There was substantial ground to justify an application, and would justify interdict for the future, for this reason, that they never said, "We are sorry we pirated; it was

a mistake." I am entitled to take it that those people were contumacious. They have not showed cause why they should not be liable in expenses.

LORD MURRAY: I had probably better defer indicating my views on the question of costs, although they are quite clear at the moment, until the undertaking is in.

MR. Keith: This has been really a discussion on interim interdict, although you did not hear me on this matter. The whole expense of this discussion has been as to interim interdict.

LORD MURRAY: Enrol the case for Friday, and if counsel then state that they are agreed, I will deal with the matter then.

The case was thereupon adjourned.

Friday's Proceedings

Counsel for the parties again appeared before Lord Murray on December 15, and mentioned the action of suspension and interdict at the instance of Morgan Brothers (Publishers), Ltd., against Alexander Murray, Glasgow. In the interval since the last hearing of the case during the interval since the last hearing the them. draft minutes embodying a proposed undertaking by the respondent had been prepared on behalf of the partics. These were in the following terms:—

Draft Minute for the Respondent

Keith, for the respondent, stated to the Court that the respondent had undertaken, and hereby undertakes, without any admission of infringement in the past, that he will at no time in the future infringe any copyright of the complainers' in the publication known as The Chemist and Druggist Retail Price List.

Draft Minute for the Complainers

Proposed undertaking by Alexander Murray as to infringement of copyright belonging to Morgan Bros. (Publishers), Ltd.:—I, Alexander Murray, of 255 Albert Road Pollokshields, Glasgow, proprietor editor and peblisher of "The Scottish Chemists' Retail Price List," considering that a note of suspension and interdict was presented in the Court of Session at the instance of Morgan Brothers (Publishers), Ltd., whose registered office is at No. 42 Cannon Street, London, complainers against me as respondent, in which the complainers craved the Court to interdict me from printing or otherwise multiplying or publishering property. respondent, in which the complainers against me as interdict me from printing or otherwise multiplying or publishing issues of the price list belonging to me titled "The Scottish Chemists' Retail Price List," containing entries of drugs, chemicals for the retail trade, pharmaceutical preparations used in prescriptions, surgical dressings, and photographic goods, with the relative prices of same, which had been copied from The Chemist and Druggist Retail Price List, the copyright of which belongs to the complainers: And, further, considering that at the hearing on said note and the answers lodged by me thereto before the Honourable Lord Murray, Junior Lord Ordinary, on December 12, 1922, it was agreed that I should grant an undertaking in the terms aftermentioned: therefore, I do hereby undertake and agree that from and after the date hereof I will not print, or otherwise multiply or publish, issue, put into circulation, or sell any books, or catalogues, or price lists containing prices copied from the prices set footh in the said The Chemist and Power Prices. catalogues, or price lists containing prices copied from the prices set forth in the said *The Chemist and Druggist* Retail Price List belonging to and published by the complainers: In witness whereof.

MR. PATRICK, for the complainers, said: May I mention the matter of the suspension and interdict by Morgan Brothers? That is the copyright suspension and interdict. Your Lordship will remember that counsel thought they would pretty readily come to an agreement upon the matter of an undertaking, and that thereupon the note could be dismissed. We prepared and thereupon the note could be dismissed. We prepared and submitted to the other side an undertaking which merely, after narrating the action, set forth that the respondent indertook not to copy again. My friends won't take that formal undertaking, which I should have thought was bald enough and clear enough, and proposed an undertaking "without any admission of infringement in the past." Now, my Lord, my clients say that is entirely unsuitable to them. If these words were struck out they do not mind. They want a simple undertaking but they won't have an undertaking which infers that they have brought an action which is without justification. In these circumstances, if parties cannot come to an agreement. circumstances, if parties cannot come to an agreement, we will require to be heard further. I have already made

my observations on the question of interim interdict, and my friend will require to be heard on the matter.

Mr. Keith, after quoting respondent's minute: Now, my Lord, that meets, I think, in almost exact terms what was arranged between my friend and Mr. Robertson, and meets, I think, in precise terms what was said before your Lordship when the matter was discussed.

MR. PATRICK: I am entirely at variance with my friend

on that. Nothing was ever said about no admission of infringement. It was "no apology"; that was all.

Mr. Keith: What my friend was anxious about, and the only thing that weighed with your Lordship, as I gathered, in the discussion was that my friend was apprehensive that there might be some infringement of his convigible in the future and that was the only noint on copyright in the future, and that was the only point on which my friend desired an undertaking. My Lord, that undertaking is given here, and in the course of the discusthat they had come to an arrangement upon this basis, that an undertaking should be given that there should be no infringement in the future, and Mr. Robertson interjected the remark, "Without any infringement in the past.

LORD MURRAY: Certainly conserving your bona fides, but, of course, I cannot decide this matter as between You have tendered an undertaking which Mr. counsel. Patrick says is not acceptable. There seems to be no

MR. KEITH: There is the undertaking, and I thought that was all he wanted—that there would be no infringement in the future. I cannot see how I can admit that there has been infringement in the past. Even assuming certain errors were made in July 1922, are these errors such as would amount to infringement? and there is law with the treatter. We shall be also to give the undertaking on that matter. We shall be glad to give the undertaking as to no infringement in the future.

LORD MURRAY: It seems to be a most insubstantial business. Are you apprehensive on the question of costs?

MR. PATRICK: No, my Lord. My own feeling is that I have come into Court and am entirely prepared to prove that there has been infringement in the past. My friend says, "I admit I copied." He says now, "I won't admit that." He says he copied on his pleadings. I should have thought the gracious thing to be done was to tender an apology and say, "It was done inadvertently and I am sorry." The undertaking was perfectly unqualified, but the sting of this "without any admission of infringement in the past" is what puts it on my clients in the publication of this matter. He puts the sting upon them that they brought an action that should not have been brought, and therefore we propose to go on to prove these has been and therefore we propose to go on to prove there has been infringement in the past and there has been mala fides, and therefore we must hear the case out.

The case was then put down for December 19.

RUBBER SPONGES .- Certain volatile substances, usually a mixture of alcohol and amyl acetate, are employed to inflate the rubber. To prevent premature evaporation sulphur, chalk, etc., are added. After passing through the vulcanizer, where the mixture is exposed to the pressure of steam of varying pressures for some time, and when the sponge material is removed, it is finished by boiling in a two per cent solution of soda.

A PHARMACIST'S OATH.—"The British Medical Jour-nal" quotes the following from "La Chronique Médicale" as a copy of the oath taken by pharmacists in France in the seventeenth century :-

I swear before God, the author and creator of all things, to respect and serve as well as in me is, not only the doctors of medicine who have given me instruction in pharmacy, but also my pharmacist teachers under whom I have learnt.

Not to speak evil of my former doctors, pharmacist

teachers, or any other persons, whoever they may be.

To do all that I possibly can for the glory, honour, ornament, and dignity of the profession.

Not to teach its secrets and curiosities to idiots or unsuitable persons.

Not to do anything rashly without the advice of doctors.

To conduct myself properly with women when it is necessary to apply a remedy, and never to give any kind of poison to any person.

The Opium Traffic

The proceedings of the Advisory Committee on traffic in opium, held under the auspices of the League of Nations at Geneva early in the year, and reported in various issues of The Chemist and Druggist, have now been made public. It appears that the first meeting of the Advisory Committee was held in May, 1921, when a questionnaire to be issued to all Governments was drawn up in order to obtain the information which would enable it to present to the Council a full report of the present position in regard to the traffic the measures taken to control production, tribution, and use of the drugs. Unfortu traffic and Unfortunately the information obtained was meagre, the greatest diffi-culty being that many Governments were unable to furnish statistics as to the manufacture, import, export, and distribution of the drugs. Moreover, no information was received from a number of members of the League, including the Serb-Croat-Slovene State and Persia, which are important opium-growing countries, nor has any information been received from the United States of America, which is one of the largest importing and manufacturing countries. A general review of the traffic in opium and other dangerous drugs is therefore not yet possible. All countries which are parties to the Convention are being asked, in accordance with the recommenda-tion of the Committee, approved by the Assembly, to make an annual report to the League on the execution in their territory of the provisions of the Opium Convention with statistics of production, manufacture and trade, and the Committee expect that the reports for 1921, and still more the reports of 1922, will give much more complete information.

The Committee have referred to the fact that no information has been forthcoming from the Government of the United States of America. The United States, though not a member of the League, has, under Article 21 of the Opium Convention, agreed like the other signatory Powers, to communicate through the Ministry of Foreign Affairs for the Netherlands:

"(a) The texts of the existing laws and administrative regulations respecting the matters referred to in the present Convention or promulgated in virtue of the clauses thereof;

regulations respecting the matters referred to in the present Convention or promulgated in virtue of the clauses thereof; (b) Statistical information as regards the trade in raw opium, prepared opium, morphine, cocaine, and their respective salts, as well as in the other drugs or their salts or preparations referred to in the present Convention."

The statistical information which has not yet been furnished would be of the greatest value, and they recommend that the Netherlands Government should be asked to make application for it to the United States Government. The Committee venture to express the hope that means may be found before long by which the cooperation of the United States in the work of giving full effect to the provisions of the Opium Convention of 1912, in the framing of which they took so large a part, may be secured. The Committee feel that they cannot emphasise too strongly that it is only by the fullest international cooperation that a traffic which is world-wide in its ramifications can be effectively controlled.

In acordance with the recommendations of the Assembly last September, the Council invited the Governments of Germany and the Serb-Croat-Slovene State to appoint representatives on the Committee. Dr. Anselmino, of the German Health Department, was accordingly appointed by the German Government, and the Committee desire to express their sense of the great value of his assistance.

THE PRESENT POSITION

At the time of the meeting of the Assembly last September the following members of the League had not ratified the Opium Convention, nor signed the Fourth Protocol bringing the Convention into force: Albania, Argentine, Chile, Columbia, Costa Rica, Esthonia, Finland, Latvia, Lithuania, Paraguay, Persia, Salvador, and Switzerland; and the States of Denmark and Venezuela, though they had ratified the Convention, had not signed the Fourth Protocol. Since that date, Chile, Columbia, Denmark, Finland, and Lithuania have put, or announced their intention of putting, the Conven-

tion into force. The Committee urge in particular the importance of securing the adhesion of Switzerland and Persia to the Convention. Switzerland is a considerable exporter of the drugs, but there appears to be a constitutional difficulty in the way, the regulation of the trade in "dangerous" drugs being a matter within the province of the Cantonal Governments, and not the Federal Government. Persia signed the Convention in 1912, but with a reservation in regard to Article 3 (a) which requires Contracting Powers to "take measures to prevent the export of raw opium to countries which shall have prohibited its entry." And she has so far not ratified the Convention. There is an important export trade in Persian opium, and the Committee ask the Council to urge the Persian Government to adhere to the Convention in its entirety, and to put its provisions into force with as little delay as possible. Turkey is the most important country which has not put the Convention into force. Its ratification was made one of the terms of the Treaty of Sevres, and the Committee would like the insertion of a similar provision in any fresh treaty which may be concluded.

System of Importation Certificates

Closely connected with the foregoing question is that of the adoption of the system of importation certificates which was recommended by the Advisory Committee last year, and unanimously approved of by the Assembly. The Committee regret that very little progress has been made. This system was recommended as the most effective way of enabling the State to carry out their obligations under the Convention in regard to the control of exports and imports, but its success depends on its being generally adopted. It is obvious that if some States adopt the system and others not, foreign buyers will tend to send their orders to the States from which they can obtain the drugs without the necessity of furnishing an "impor-tation certificate." Complaints have already been received by Governments of countries which have introduced the system that the business of their traders is being prejudiced. It appeared that a certain amount of mis-apprehension existed as to the nature of the certificate required to be given by the Government of an importing country. The system requires an importer of the drugs to obtain from his Government in the case of each consignment imported, a certificate that the import of that consignment is approved by the Government, and is required solely for medicinal or scientific (or, in the case of raw opium, for legitimate) purposes. Some Governments appear to have understood that this meant they had to guarantee that no illegitimate use would be made of the drugs when imported. An absolute guarantee of this kind cannot of course be given. All that is required or expected is that the Government should be satisfied that the imports are within the limits of the legitimate requirements of the country and that the persons applying for permission to import are persons engaged in carrying on a legitimate trade in the drugs and are of good repute.

CONTROL OF OPIUM AND DANGEROUS DRUGS

At the meeting of the Committee last year, it was pointed out that one difficulty with which the parties to the Convention were faced in carrying out their obligation to limit the use of the drugs to medical and other legitimate uses (Chapter III. of the Convention) was the want of information as to the actual medical and other legitimate requirements of the various countries. As long as the drugs are produced in quantities exceeding the legitimate requirements there is a grave danger that, whatever measures of control may be enforced, the surplus will find its way into illegitimate channels. They accordingly recommend that an inquiry should, if possible, be made to determine approximately the average legitimate requirements of these drugs in various countries, and the International Health Committee of the League was asked by the Council to undertake it. The Health Committee have, unfortunately, not been able to carry their investigations very far. Very great difficulties were experienced in framing any scheme for obtaining data as to the extent to which the drugs are used in legitimate medical practice in large and populous countries, such as Great Britain or

France, where, moreover, the question is complicated by the fact that a large export business is carried on in the drugs and their preparations. In the first instance, the Health Committee decided to obtain the "experience of a few civilised countries, relatively small in population, in which, so far as it is known, little, if any, material abuse of these drugs exists." Belgium, Switzerland, Denmark, Sweden, Australia and New Zealand were the countries selected. The results of these inquiries are summarised in a memorandum by Sir George Buchanan and Dr. Carrière, appended to the report. The results, though they throw some light on the question, do not enable any general conclusions to be drawn. Considerable variations indeed must be expected between the experience of different countries, as medical theories regarding the employment of the drugs vary, and the consumption in any country also depends on the nature of the diseases prevalent and on the morbidity rate. The experience, for instance, of the requirements in European countries is little guide to the requirements in an Eastern country. The Advisory Committee hope that the Health Committee will pursue their inquiries. A careful statistical study over a series of years of the returns supplied by the Governments of their imports, exports, etc., will throw considerable light on the problem, and they recommend that this should be undertaken by the secretariat.

After dealing with the cultivation of the poppy in China, where the Committee "is forced to the conclusion that there is a large and widespread revival both in cultivation and use," the report deals with

Morphine Smuggling in the Far East.

This was one of the most serious questions to consider. There is a large body of evidence that in recent years morphine has been introduced illicitly into China on an enormous scale and that the morphine habit has become widespread, particularly in the provinces of North China. This state of things has become a matter of the gravest anxiety to the Chinese Government and to all who are interested in the welfare of China. Though complete information as to the extent of the traffic, or the channels by which it is carried on, is not in the possession of the Committee, there is reason to suppose, from the records of seizures by the Chinese customs and other sources of information, that at the present time the traffic is largely in the hands of Japanese traders. The Committee feel strongly that the matter is one in which the strongest and most energetic measures are necessary. The Committee's task has been considerably facilitated by the very full information which has been given by the Japanese Government in reply to the League's questionaire bether at the quantities of morphic important the district. naire both as to the quantities of morphine imported into Japan or manufactured in Japan, and as to the measures which, since the beginning of 1921, the Japanese Government has been taking to control the traffic; and also by the attitude taken up by the Japanese representative on the Committee on behalf of his Government. He admitted that smuggling had been carried on between Japan and North China, though to what extent the Japanese Government were unable to state, as previous to 1921 there had been no regulations concerning import, export or production; and expressed the intentions of his Government to do all in its power to stop the illicit traffic. He desire to have the Japanese Government would earnestly desire to have the close co-operation of the exporting countries in the matter of the control of the traffic in dangerous drugs. He also said that the Japanese Government would welcome the assistance of representatives of the League in carrying out any investigations that might be thought necessary. It is clear from the figures supplied by the Japanese Government in its reply to the question-naire that Japan has been importing, for several years past, quantities of morphine far in excess of the normal legitimate requirements of Japan itself. The following table shows the quantities imported and manufactured during the past eleven years in pounds:—

	Imported	Manufactured			
Year	lb.	Japan	Formosa		
1910	1,387	_			
1911	1,830		_		
1912	2.013				
1913	5,695	-	-		

	Imported	Manufactured			
Year	Ϊb.	Japan	Formosa		
1914	11,295	-	_		
1915	22,408	100	1,290		
1916	37,131	600	6,340		
1917	37,294	1,190	6,548		
1918	10.229	2,134	4,450		
1919	25,566	4,820	3,101		
1920	48,689	7.833	8,018		

After making allowance for the increase in the medical requirements during and after the war, the Committee can feel little doubt that much of this morphine has found its way into China. They note the promise of the Japanese Government, conveyed through its representative, to make the strictest possible investigation into the present illicit traffic; and they suggest that very close co-operation should be established between the Chinese maritime customs and the Japanese authorities so that in all cases of seizure of morphine coming from Japan, the morphine may be traced back to its source and the necessary measures taken by the Japanese authorities. The Committee call attention to the fact that the Japanese figures of imports from certain countries are much larger than the quantities shown as exported from those countries to Japan. It is very desirable that the causes of these discrepancies should be ascertained.

TRAFFIC IN DANGEROUS DRUGS

The Committee regret that they are not able to report as fully as they could wish. The statistics as to the manufacture and distribution which have been formulated manufacture and distribution in particular, no particulars as to manufacture have been supplied by several important manufacturing countries. The Committee recommends manufacturing countries. The Committee recommends that a special effort should be made by the secretariat to complete the information in regard to cocaine as soon as possible, particularly in regard to the places of manufacture, statistics of production, and channels of distribution, and that the Governments should be asked to furnish the secretariat with as close an estimate as possible of the annual production. The experience of different countries shows that in corsequence of the enormous profits realised by illicit traffic, pecuniary penalties are no longer a sufficient deterrent, and the Committee suggests that the question of providing for substantial sentences of imprisonment as an alternative penalty should be considered by the Governments. It is very desirable that, with a view to discovering the channels of the illicit traffic in the drugs, information as to all seizures by the customs or police authorities (where the place at which the drug was manufactured and the country from which it has been obtained are known) should be communicated to the Government of the country concerned so that full investi-gation may be made. The Canadian Government have pointed out the desirability of obtaining, in addition to other statistical information, information as to the stocks of various drugs in any country on a given date. Committee felt that there would be a very great difficulty in taking such an inventory in countries where the number of retailers authorised to sell the drugs is very large, and that the most that can be done is to obtain the stocks in the hands of the wholesalers. Even so, the information will be difficult to obtain, as a considerable amount of the drugs is made up into, and stocked in, the form of pre-parations. The Committee have postponed making a definite recommendation on the matter until the statistics already obtained or about to be obtained as to production and distribution have been thoroughly examined. At the meeting of the Assembly last September, the delegate of France called attention to the growing use by drug takers of other drugs not at present covered by the International Opium Convention, and on his suggestion the Assembly adopted a resolution recommending that the Council should request the Advisory Committee to "extend their investigations to include not only the drugs mentioned in the Convention of 1912, but also all dangerous drugs of whatever origin which produce similar effects and to advise as to the desirability of convoking a further international Conference of States which are parties to the Convention, as well as States Members of the League of Nations, with a view of drawing up a Convention for the suppression of the abuse of such drugs.'

The French Government was requested by the secretariat to supply a list of drugs which had been found in France to be specially liable to abuse, and the list supplied by the French Government has been laid before the Committee. It was only received, however, a few days before the meeting of the Committee, and there has been no time to examine the matter in detail or to obtain the observations of the different Governments. The Committee recommend that the list should be referred to the interested Governments for the observations of their health departments, and, pending the receipt of this information, the Committee have postponed the consideration of the question of a further international conference. It will be seen that some of the drugs included in the list are derivatives of morphine, and under the provisions of the Convention "all new derivatives of morphine, cocaine, or their respective salts, and every other alkaloid of opium which may be shown by scientific research, generally recognised, to be liable to similar abuse, and productive of like ill effects," are automatically brought under the operation of the Convention. It may be well to observe in passing that some of the drugs in the list are used as substitutes for morphine and cocaine, and are regarded by medical opinion a being, at any rate, much less injurious. It will not be desirable, therefore, to place any obstacles in the way of their use unless the necessity for control is fully proved.

In the answers at the end of the report is one dealing.

In the answers at the end of the report is one dealing with the system for importation certificates, with an explanatory note by the Secretary-General, who says the system has a two-fold aspect, thus:

(a) If a dealer in dangerous drugs in country A desires to import a supply of drugs from country B, he must, in the first place, obtain from his own government a certificate that the import of that particular consignment of the drugs is approved by the government and is required for legitimate purposes (or, in the case of morphine, heroin, cocaine, or medicinal opium, that it is required solely for medicinal or scientific purposes), and must forward the certificate with or in support of his order to the exporting firm in country B. The government of country B will not issue its licence for the export of the consignment of the drugs to country A until the certificate has been produced to it by the supplier in country B from whom the drugs have been ordered.

(b) Conversely, if a dealer in dangerous drugs in country A desires to export drugs to country C, the government of

(b) Conversely, if a dealer in dangerous drugs in country A desires to export drugs to country C, the government of country A will allow the export only on the production of a similar certificate from the government of country C that the particular consignment desired to be exported is required in country C for legitimate purposes (or for medicinal or scientific purposes, as the case may be), and that its import is approved by the government in country C.

It will be seen that, by the adoption of this system, country A is protected against the export of dangerous drugs from country B for improper purposes, as the government of country B will not allow the export to country A except with the approval of the government of country A; and, secondly, that the government of country A has a guarantee that the dangerous drugs are not being exported from its own territory to other countries for improper purposes, as it will only allow the export of the drugs with the approval of the government of the importing country, and on the assurance that the drugs are required for proper purposes.

own territory to other countries for improper purposes, as it will only allow the export of the drugs with the approval of the government of the importing country, and on the assurance that the drugs are required for proper purposes.

The system is based on the assumption that every Member of the League controls the export of the dangerous drugs from its own territories by prohibiting the export of the drugs except with the licence of the government. It may be pointed out here that in order to carry out the scheme recommended by the Opium Advisory Committee and approved by the Council and Assembly of the League, it is necessary that a separate licence should be required in respect of each consignment of the drugs exported. It is obvious that the grant by a government of general export licences to the exporting firms which would leave the exporting firms free to export any quantities of the drugs to any persons in any country would not be sufficient to carry out the obligations which the government has undertaken by the International Opium Convention,

The report also deals with the distribution of drugs through the post, propaganda in oriental countries, offers of assistance from the International Missionary Council, the budget of the opium secretariat (96,250 Swiss francs is to be appropriated to the work), and the exchange of laws and regulations between the Signatory Powers.

Chemical Society

A MEETING of the Chemical Society was held on December 14 at the Institution of Mechanical Engineers, Storey's Gate, Westminster, London, S.W., Professor H. B. Dixon, F.R.S., in the chair. Professor C. H. Desch gave a lecture on The Metallurgical Applications of Physical Chemistry, in which he drew attention to the fact that in the extraction of metals from ores in the course of centuries a store of knowledge based on practical experience had been collected. It was this knowledge that had been utilised by the scientific chemist, and indeed the science of metallurgy represented the application in practice of both chemistry and physics. As an example of the application of science to empirical experience, he instanced the case of the roasting of sulphide ore in air. The success of this process depends on the roasting, which has to be carried out in such a way as to avoid the formation of sulphates, by maintaining an equilibrium between temperature and access of air. Here experience preceded theoretical study, but now, in consequence of an exact study of the laws of equilibrium, it has been possible to obtain a higher yield of metal in this process. The reduction of iron ore in the blast furnace is based on theoretical studies of the various reactions at play. Thus we have two reversible reactions:

 $\begin{array}{c} \operatorname{FeO} + \operatorname{CO} & \longleftrightarrow \operatorname{Fe} + \operatorname{CO}_2 \\ \operatorname{C} + \operatorname{O}_2 & \longleftrightarrow \operatorname{2CO} \end{array}$

since iron is capable of taking up carbon and also oxygen. This equilibrium was shown by means of several slides, graphically demonstrating the three zones present in the blast furnace, i.e., FeO, Fe₃O₄ and Fe. These three zones meet at one common point, at which a temperature of 565 deg. is recorded. The lecturer next dwelt on the question of the fusibility of slag, a most important point, since the slag has to be poured away in order to obtain the metal. The viscosity of the slag plays an important rôle in metallurgy, and the nature of the slag has to be taken into consideration in the process the slag has to be taken into consideration in the process of extracting metals. The necessary oxygen reaches the metal only from the slag, a point which illustrates the importance of its composition. In this connection he referred to the difficulties which were at first experienced during the war in utilising Lancaster ores for the extraction of iron, since these ores had a different composition from the foreign ores formerly utilised in the same blast furnaces, a fact which necessitated an altera-tion in the slag employed. In the open hearth method of extraction, the oxygen is supplied by the FeO present in the ore, and the lecturer mentioned that experienced smelters were able to tell the ratio of carbon present in the metal from the character of spoon samples of the slag. He then referred to the fact that the molten metal contains gases in solution, thus hydrogen is soluble in iron, but the content falls on cooling, with the result that so-called "blow holes" are formed, and this occurrence was demonstrated by numerous slides of sections of metals. In turning to a discussion of alloys, Professor Desch stated that these represented a new scientific idea, embodying the practical application of physical facts. Metals are crystalline bodies, and slides physical facts. Metals are crystalline bodies, and slides were shown to illustrate the aggregates of crystals present in certain specimens. Zinc especially crystallises well, and slides showing sections of galvanised iron with beautiful zinc crystals were thrown on the screen in illustration of this point. The question of equilibrium plays a highly important part in all alloys, particularly the relation of metals to each other, and also the allotropic changes which certain metals undergo in alloys have to be taken into consideration. Thus the various varieties of steel are due to the suppression of certain changes by cooling, and by differences in the equilibrium between the Fe and FeO content. Surface tension also is an important factor in alloys, and in this connection Professor Desch discussed at length the similarity existing between foam cells and metal crystals. The lecture was profusely illustrated by slides and diagrams.

Pharmaceutical Society Of Great Britain

Branch Meetings

Blackburn.—There was a representative gathering of the pharmacists of North-East Lancashire, on December 13, when a branch of the Pharmaceutical Society was formed to cover the towns of Blackburn, Darwen, Great Harwood, Rishton, Clitheroe, Accrington, Haslingden, Church, Oswaldtwistle and Clayton-le-Moors. It was intimated during the proceedings that Burnley, Nelson and Colne would form part of a separate branch for this area. Mr. R. Pickup, chairman of the North-East Lancashire Chemists' Association, presided, and was sup-Lancashire Chemists' Association, presided, and was supported by Mr. F. Pilkington Sargeant (Leeds). Vice-President of the Pharmaceutical Society; Mr. H. O. Lloyd (Southport), a member of the Pharmaceutical Council, Mr. R. Lord Clifford, J.P., former member of the Council for twenty-one years; Councillor W. H. Grimshaw; Councillor C. A. Critchley; Mr. William Holt and Mr. Fred Law (secretary). Mr. Lloyd said pharmacists who were in touch with the trade Press would be conversant with the revised scheme of organisation. What the Society proposed was to organise pharmacists and student associates who resided within the various areas of the country into separate and distinct branches. All would agree that the Pharmaceutical Society had always shown itself ready and willing to further the true interests of pharmacy. During the passing of the National Health Insurance Act but for its activities the trade side of pharmacy would not be in the state it was to-day. It was very necessary that all members of the profession should be so organised that they could be called together was very necessary that all members of the profession should be so organised that they could be called together at the shortest notice to assist in taking action to protect their interests. They recently had an example of a necessity of this kind, when the Dangerous Drugs' Regulations were framed. They all knew that had it not been for the intervention of the Society the regulations adopted would have been very much more difficult for men in business than applied at the present time. Councillor Critchley asked what would become of the existing North-East Lancashire Chemists' Association under the new scheme? They already had a branch of the R.P.U. in the district, and the new branch of the Society would practically cover the ground previously covered by the Chemists' Association. Personally, he did not think there was any need for the existence of two not think there was any need for the existence of two societies. Mr. Lightbrown said the new branch would embrace the whole district, and not merely the borough as was the case with the Chemists' Association. It would be advantageous to all concerned if all the sections of be advantageous to all concerned it all the sections of the branches were represented at their general meetings. Mr. Fred Law (secretary) said he did not anticipate the slightest difficulty in the matter of organisation. He took it that the new branch would supersede the old North-East Lancashire Association. Mr. Lloyd agreed that the great change would be that the local associations would become the centres of district organisations scattered throughout the whole country. Meetings were not to be called too often—probably not more than once preparater. Mr. R. L. Gifford suggested to Mr. Lloyd that he should create a close personal interest in this particular district and become the accepted member of the Council for North-East Lancashire. Mr. F. Pilkington Sargeant said Mr. Lloyd had fully explained the objects of the new branch and had pointed out the importance of organisation. They would all realise that the basic principle which influenced the formation of the Pharmaceutical Society was the protection of the public, and the work had since been carried on with that object uppermost. At the same time, coupled with this protection there must always he a contribute property. this protection, there must always be a certain amount of self-preservation, and that must not be overlooked by them. There were people who would like to detract from their title and qualification, both of which they must resolutely defend. There were men in all Associations who imagined that the only thing which would be of any benefit to them was that which brought immediate profit. There was a side, however, providing profit, not at the moment, but in the long run, by raising the status

of the profession, for in this way they would increase the remuneration. There would be a connecting link between local branches and the central body, and representations could be made to the Society in London on any subject which local representatives desired to bring forward. That was a great advance on anything which had applied hitherto in the matter of local associations, for it meant that they would be in direct touch with the Pharmaceutical Council. On the motion of Mr. R. L. Pharmaceutical Council. On the motion of Mr. R. L. Gifford, J.P., seconded by Mr. Eyles, it was decided to form a North-East Lancashire Branch of the Pharmaceutical Society. Mr. R. L. Gifford was unanimously chosen as Chairman; Mr. S. A. Sidebottom (Accrington), Vice-Chairman; Mr. Fred Law, Secretary and Treasurer; and Messrs. W. R. Cameron (Oswaldtwistle), W. H. Lightbown (Blackburn), R. Pickup (Blackburn), E. Jepson (Darwen), and Messrs. Walker and McMyn as Committee, with power to co-opt. Councillor Grimshaw caused some laughter by remarking that Mr. Lloyd had caused some laughter by remarking that Mr. Lloyd had well maintained the reputation of the Pharmaceutical Society by his explanatory message and his non-committal attitude. Mr. Turnbull expressed surprise at the extremely long hours worked by Blackburn chemists, and thought that on Monday and Tuesday at least they might with advantage reduce the closing hour from 8 p.m. to 7.30 p.m.

Bolton.—At a meeting held on December 13, the Bolton and District Branch of the Pharmaceutical Society was inaugurated. Mr. Pilkington Sargeant (Vice-President inaugurated. Mr. Pilkington Sargeant (Vice-President of the Pharmaceutical Society) expounded the objects in forming branches, and the following were elected officers:—Chairman, Mr. W. R. Blain, Ph.C.; Vice-Chairman, Mr. F. Brindle, Ph.C.; Secretary, Mr. J. T. W. W. Hay; Treasurer, Mr. G. Howarth. Together with an executive of six members. Meetings will be held four times a year.

Insurance Act Dispensing

Record of matters concerning Chemists' interests in the National Health Insurance Acts

Local Reports ENGLAND AND WALES

Birmingham.—The Pharmaceutical Committee met on December 18, Mr. W. H. Whittock in the chair. It was reported that the request of the Committee that chemists should be advised of the number of scripts to which payments relate had been acceded to. Instructions were given for the issue of a circular to panel chemists upon the following: Instances having occurred where 4 oz. of lin. alb. has been supplied where no quantity is ordered on the prescription, attention is drawn to the fact that the Health Insurance Formulary instructs that 2 oz. should be sent, and that quantity only is allowed for. The Committee strongly deprecate the practice of affixing new labels over old in Insurance dispensing. Evidence of a continuance of the practice, in spite of a previous circular note on that subject, has recently been before them in a very pronounced form. The new provisions with relation to "dressings" come into force on March 1, 1923

Kent.—At a meeting of the Insurance Committee on December 13, Dr. Randell, referring to four cases, where, on analysis, medicines supplied under arrangements made by the Analysis of Medicines Sub-Committee had been found to be incorrectly dispensed, said that the result showed that dispensing is not always done as it should be. He hoped that detailed accounts of those proceedings would be sent to chemists engaged on the panel throughout the county. The chairman said that fifteen tests were made, out of which four were found inaccurate.

Mr. Tapp questioned whether it was a proper thing to send details of those cases to the chemists. There were a considerable number of chemists who did not care whether they worked under the National Health Insurance Act or not. If chemists did not rise to the occasion it would mean setting up in municipalities a centre where there could be guaranteed a pure supply of drugs. Mr. Whyte remarked that chemists doing their duty conscientiously, as most of them were, would value the information. The proposal was agreed to.

Associations' Winter Session

Ealing.—The Ealing Pharmacists' Association met, on December 12, when the habits and ways of the Chinaman were described in an interesting address by Mr. F. Browne, who had spent about twenty-five years in Hong Kong.

Manchester.—A meeting of the Manchester Pharmaceutical Association was held on December 13. The President (Mr. E. H. Simmons), who occupied the chair, introduced Mr. H. Haworth, qualified chemist and technical supervisor of the Manchester Prescription Pricing Bureau, who gave an address on Pricing Insurance Prescriptions. Mr. Haworth at the outset explained the anomaly of several charges. For instance, if a doctor ordered twenty-four tablets the dispensing fee allowed was 5d., but if twenty-five tablets were ordered 2d. more was allowed for the one tablet, making the dispensing fee 7d. Then he went on to describe the system obtaining since 1915, and how all the prices for liquids were ing since 1915, and how all the prices for liquids were calculated on the 8-oz. mixture basis. The specific gravity of every liquid dispensed was ascertained, if not already of every liquid dispensed was ascertained, if not already known, and then the price calculated accordingly. Articles allowed and disallowed were described, and Mr. Haworth went on to explain by means of statistical tables how the correct price of any mixture or ingredient of a mixture was estimated. He detailed many curious prescriptions they had had to price, many of which he was sure had never been dispensed as written, but the dispenser had not assisted the pricing bureau by noting what had been done. The doctor's signature or initials should always be obtained on every prescription altered should always be obtained on every prescription altered in any way. In November (Mr. Haworth said) they had to return 170 prescriptions for signature of panel doctor or for the filling in of a formula. Any mixture which was not one of the recognised formulary must have the maker's name on the formula filled in before sending to the Pricing Bureau. On prescriptions marked "urgent," and dispensed out of ordinary business hours, he pointed out that all fees on the script were doubled. Mr. A. Hershberg, secretary of the Pharmaceutical Insurance Committee, said panel chemists ought to realise that they are working against their own interests by not having the alterations or annotations made on the script before they sent them to the Pricing Bureau. Mr. Haworth and his assistants deserved their sympathy for having to decipher some of the scripts he had seen. He had always found the Manchester Pricing Bureau (which had dealt with millions of scripts) wonderfully exact, and the efficient manner in which they performed the work was worthy of the warmest praise. Mr. J. H. Franklin pleaded for uniformity of formula, and suggested the institution of a National Health Insurance Pharmacopæia. Mr. J. H. Nidd said this had been attempted some years ago, and pointed out that a serious aspect would arise if chemists filled in quantities. The better plan would be to get the medical man to do the atterations and initial them. The President said slipe. alterations and initial them. The President said slipshod dispensing is contrary to their contract with the Insurance authorities and prejudicial to the interests of the craft. Mr. Hersbberg proposed a vote of thanks to Mr. Haworth, which Mr. Joseph Bell seconded.

Salford.—The monthly meeting of the Salford Pharmaceutical Association was held on December 14, the President (Mr. H. Bellringer) presiding. Mr. L. M. Parry (Liverpool), member of the Council of the Pharmaceutical Society, in addressing the meeting, explained the new syllabus and the forthcoming educational changes. He emphasised the responsibility of an employer with regard to the proper training of an apprentice in shop matters. Mr. Parry then described the work of the Benevolent Fund and appealed for the formation of a small auxiliary fund for purposes outside its scope. The present position of the Auxilliary War Benevolent Fund was also outlined. In the discussion which followed, Mr. Kirkby, in alluding to the importance of preliminary education, said that all possible help in this direction would be given by local members. Mr. Greer recommended that Latin should still be one of the compulsory subjects for the Preliminary examination.

The Chemical Foundation

By "The Man from London"

THE suit of the Synthetic Patents Co. against Francis P. Garvan, former Alien Property Custodian, and John Burke, former U.S. Treasurer, for recovery of some three-quarters of a million dollars, is to go to trial, as Judge Knox has denied the motion of Garvan, for the dismissal of the complaint recently in the U.S. District Court, Southern District of New York. The suit involves \$763,131, which the Synthetic Patents Co. alleges were over-payments for property to Garvan and Burke and three residents and Carl Duisberg. The three Germans originally owned all citizens of Germany, Rudolph Mann, Christian Hess and Carl Duisberg. The three Germans originally owned all the stock in the company, which the Alien Property Custodian seized during the war and sold to the Sterling Products Co. of West Virginia, and the proceeds turned over to Mr. Burke, who was at that time Treasurer of the United States. Judge Knox, in making his opinion, declared in part:—In each of the present suits plaintiff "inadvertently" paid to Hess, Duisberg and Mann, sums of money which, by virtue of the laws of the United States, it was under no obligation to pay, but which, on the contrary, it was specifically bound to turn over to the the contrary, it was specifically bound to turn over to the United States. Stripped of such complications as arise by reason of the seizure of the aliens' property by the custodian, the matter is one which primarily interests plaintiff and the alien defendants; and if acting in good faith, plaintiff made an honest mistake, there is no good reason why the aliens should be enriched at the expense of the plaintiff. In view of the allegations of plaintiff's bills it cannot be said that plaintiff's hands are clean, but the true intent and purpose of the agreements will be shown at the trial. Mr. Garvan, the President of the Chemical Foundation, has appeared before the sub-committee on the judiciary of the United States senate and his testimony has been sent out in book form. He shows as far as the dye interests were concerned America was at the mercy of Germany before the war. America got the dyes or did not get them, and always at their price. Also the German trust by the most ruthless means of underselling, killed off all efforts to manufacture dyes in the United States for some years before the war broke out. So according to Mr. Garvan the Chemical Founda-tion sprang from the purest of patriotic motives and is avowedly a plan to curb German aggression while in the meantime dye and chemical manufacturers get into a position to compete. This he claims will take two or three years before any strong stand can be made to withstand competition, and if he has erred it has been from the purest of motives. Incidentally, the Chemical Foundation has the backing of all the chemical societies, the medical profession, and pharmacists. Public safety demands a dye industry which is now known to be closely related to the manufacture of munitions, and this industry cannot be built up in an hour or a day. The Foundation is fighting for its very existence, there is no neutral ground; if it wins out, the dye and synthetic drug industries will make great progress, should it be destroyed men will be looking for a return of pre-war German monopoly. Early in Mr. Garvan's testimony the matter of the reparation dyes; the angle that concerned the Foundation and the industry apart from the Textile Alliance, Inc., came up for discussion. Garvan stated that counsel for some other manufacturers had claimed frankly that he wanted his clients to obtain dves at the some prices which the Textile Alliance was able to obtain them. The reparation price at which the Textile Alliance obtained dyes was the wholesale price in Germany, and the price at which the Reparation Commission takes the 25 per cent. daily production of dyes is the lowest selling price in daily production of dyes is the lowest selling price in Germany, and of course that price is fixed by the cartel, so if their principal desires to sell to them, its agents, at the same price they sell to the Reparation Commission, they can do so. He claimed it was desired to break up the Reparation Commission, and should this occur it would weaken the opportunity of Congress to legislate fairly to protect the American dye industry without injuring the testile industry. American dye industry could by ing the textile industry. American dye industry could by 1925, without hardship to the textile men, stand on its

own feet; that the opportunity will never come again for us to supply the 10 per cent. of dyes which is not made in the United States. If Germany can get back that 10 per cent. she can dictate terms to the textile people which was what they were doing when the war broke out. That 10 per cent. is the club the Interessen Gemein out. That 10 per cent, is the club the interessen Gemein's schaft wants over the textile industry, so in the end the German cartel can get back the world monopoly it had in 1914, and which the war took away. There are stages of development in dye making, for instance; our indigo was first put out by American manufacturers at \$1.25 per lb., while it cost them to manufacture \$2.25 per lb. But two years working has run the cost down so that indigo the principal colour, is sold now in America at indigo, the principal colour, is sold now in America at 33 cents a pound, and, of course, there is a profit on that. The charge that Garvan, as Alien Property Custodian, had transferred the German patents to himself as Foundation—patents valued at \$10,000,000 for a sum of \$250,000, and that by German reasoning he had derived a personal profit of \$7,500,000 he denied, or that the Chemical Foundation had sold these properties for a cent more or less than they were worth. Garvan stated that during the war German agents here had formed what is known as the "Chemical Exchange," which had corraled and made a monopoly of all the phenol supply in America. After buying up all the phenol in this country this com-bination had sold it all to the Heyden Company, another German company, and to the Bayer Company, to prevent the allies getting it. Dyes are small in themselves, but there is about four billions of dollars of industry a year dependent on dyes in this ccuntry alone, using dyes, and that German agents have the full command of every jota of progress or development in that four billions of dollars of industry. There is a great institute in Germany to which all information from dye agents is brought in and carded and divided into industries. So that if the German wants to compete with a carpet man in New England he sets about his work with all the knowledge obtainable in the world and with every improvement impossible. In this way the dye industry is made to serve all other industries, and had the war not saved us in 1914 when they had a monopoly of the world in dyes their next step would have been to take for instance, that carpet industry by refraining to give any but German carpet makers new inventions in dyes. Regarding salvarsan (606), the patent on which was among those sold by the Chemical Foundation, it was brought out as official figures that ten million of persons in America were suffer-ing, directly or indirectly from syphilis.

The U.S. Tariff and the Elections

By "The Man from London"

As far as politics go it would seem the great majority of Americans never know what they want for any considerable length of time. Like children, they are attracted by every new kind of political toy balloon that their professional politicians dangle before their eyes. They are not happy until they get it, play with it a little while until it bursts, which is very often the case, and then hanker after another of a different colour and just as satisfying. Two short years ago the Republican party swept into power with the greatest popular majority known in the political affairs of this country, leaving the Democrats stranded high and dry (note the dry) in the biggest defeat ever suffered by a political party here. But since that time there has been a remarkable change, it seems, in the sentiment of the country, brought about chiefly because too much was expected from the Republicans in the way of bringing down the high cost of living, solving the unemployment question, and putting business once more into normal pre-war conditions. From the commencement of the war until America joined in the struggle, every one in this country was in the fever of making money rapidly, and the temperature kept up for some time after the war was over and the bottom suddenly fell out of business. The fever lasted longer

than the facilities for making money, and then came Prohibition, which sent the price of a drink up quite considerably, and people began to find that life was not an everlasting picnic, and were in that fault-finding mood an everlasting picnic, and were in that fault-finding mood which only required something to happen along which they could give vent to their feelings, and the new tariff law, made possible by the very men they had put into power two years ago, was very cleverly emulsified with the prohibition grievance by Democratic politicians, and well advertised all over the country, with the result of apparently turning the political current in the opposite direction. Next year will see Democratic legislators taking the places of Republicans in many parts of the country, and the Republican Congressional majority cut to a margin so small that in both Houses Republican to a margin so small that in both Houses Republican legislation will be at the mercy of a few insurgents of doubtful party regularity. The Republican papers explain everything to their own satisfaction as to the Democratic tidal wave which has washed their majority away, and profess no alarm over the result of the recent elections. The tariff played an enormous part in the voting, and has extravagant laws of the kind ever enacted. Selfish because it confers not protection but monopoly. Short-sighted because it fails to take into account that America is a creditor nation now, while it was a debtor nation when the last tariff was enacted. We are already beginning to feel the depressing effects upon our exports of the defiant refusal to help trade development so desperately needed in Europe. The Fordney-McCumber Tariff Law, says the "New York World," licensed an organised class of favoured producers to prey upon the American people for an indefinite period. It was as good as written in the for an indefinite period. It was as good as written in the drug and chemical, woollen, cotton, sugar, glove and other schedules in the tariff that special interests receiving "protection" from the Republican party were to be allowed to boost prices for whatever they produced. Prices of meats, woollens and daily commodities all along the line have been raised, and will be raised higher as "prosperity" returns to special privilege. Other papers consider the election proves conclusively that the people are preparing to repudiate a foreign policy having for its inspiration, "What do we care about Europe?" "The positive, even if now somewhat obsolete, programme put forward by former President Wilson, it is safe to say, has in principle more followers to-day than ever it had before. To that extent, the balloting may be regarded as has in principle more followers to-day than ever it had before. To that extent, the balloting may be regarded as having had a positive object." It may be well to point out that predictions from all over the country seem to presage a period of sound, healthy trade free from the boom-time elements. Labour, manufacturers, dealers and consumers are all included in the favourable conditions noted by authorities. Unemployment conditions have greatly improved since the settlement of the coal and railway strikes, and the Department of Labour reports "the most encouraging sign of increased employment and prosperity is a be bought from us goods in the amount of \$415,449,457. During both these years the Payne-Aldrich protective tariff was in operation. In 1912 the United Kingdom sold us goods in the sum of \$272,940,700, while we sold her goods in the sum of \$564,372,186. In 1913 the United Kingdom sold us goods worth \$295,564,940, while we sold the Payne-Aldrich protective tariff, our total imports from all of Europe amounted to \$819,585,326, while we exported to Europe \$1,341,732,789. In 1913 our imports from all of Europe amounted to \$892,868,384, while our exports to Europe for the same year amounted to \$1,479,074,761. All this under a protective tariff, the figures of which may bear looking over when drawing conclusions as to what is going to happen in the future.

Safeguarding Industries Act

Oxalic Acid

The following is the Referee's decision under Part I. of the Safeguarding of Industries Act in regard to the complaint that oxalic acid has been improperly included in the List of dutiable articles issued by the Board of Trade under the Act. The proceedings were reported in our issues for November 18 (p. 709), November 25 (p. 747),

and December 2 (p. 785).

The question in this case is whether oxalic acid is properly included in the List of dutiable articles. The inclusion in the List is justified on three grounds:—(1) That oxalic acid is a synthetic organic chemical; (2) that oxalic acid is a fine chemical; (3) that oxalic acid is an analytical reagent. I am not satisfied that oxalic acid is a fine chemical. Indeed, I think it is not. I am quite satisfied that its inclusion cannot be justified on the ground that it is an analytical reagent. But I have come to the conclusion that it is a synthetic organic chemical, and as such, rightly included in the Schedule. The question whether oxalic acid is a synthetic organic chemical is one of considerable difficulty. It is, I think, entirely a matter of opinion, depending upon the particular view held as to the precise limitations of the meaning of the word synthetic. In the synthetic camphor case I accepted the following definition of synthesis:— A building up of carbon compounds either from their constituent elements or from groups of differently constituted molecules by orderly steps, the result of which can be followed and from which the constitution of the structure can be deduced or inferred." It may be that on some future occasion it will be necessary to reconsider this definition, but I do not understand that this definition is challenged by either side in this case. The difference of view has reference to the question whether the steps in the building up of oxalic acid from caustic soda and carbon monoxide come within it. There is no doubt that oxalic acid is an organic body which can be built up from its elements. The process begins with the use of carbon; the number of carbon atoms in the molecule is increased, and the molecule becomes heavier. The molecular construction contains two atoms of carbon linked together. Although in practice the first step in building up is the combining of carbon monoxide and caustic soda, both those substances can be obtained from their elements. The real dispute is as to whether the steps taken in the building up are orderly steps and steps from which the structure of the resulting molecules can be deduced or inferred.

THE MAIN REACTION.

The decision seems to turn upon the view taken of the main step—the heating of the sodium formate causing the hydrogen to be liberated and the two unsaturated links to combine, forming sodium oxalate. The temperature necessary to produce this reaction is no haphazard temperature. A temperature of 440 deg. or thereabouts is necessary except in the presence of sodium carbonate or certain other substances, when a lower temperature will suffice, viz., 300 deg. to 350 deg. In this sense it is a controlled temperature. It seems to me quite impossible to rule out a reaction depending upon a controlled degree of heat from those steps regarded as synthetic.

But it is said that it is impossible to draw any inference as to the structure of sodium oxalate from the reaction in question. If the molecular structure of a substance is known before it is synthesised, and that knowfedge is capable of suggesting and does suggest steps which may possibly bring about that result, and then by experiment it is found that these steps do in fact produce that result, it seems to me that such steps are entitled to be considered as synthetic. I think that one might well have reasoned that if by heat the hydrogen could be expelled from the molecule HCOONa, leaving the unsaturated link COONa, it was at least possible that two or more of these links might combine and give the structure desired. The reasoning back from a known structure seems to me to be just as much a basis of

synthesis as the reasoning forward towards an unknown structure. Further, I do not think that the definition demands that the hypothetical operator should know exactly what is going on during the experimental reaction.

The view I take after a very careful review of the evidence both in this and the camphor case is that oxalic acid obtained by the formate process is synthetic. There is one other matter with which I must deal, viz., Mr. Swan's argument that the expression "synthetic organic chemicals" is limited to fine chemicals. He relies on the words "all other fine chemicals "as indicating that this part of the Schedule is only intended to cover chemicals that are fine. There seem to be to be insuperable difficulties about this view. It would give no independent effect to the words "all synthetic organic chemicals" or "analytical reagents." I quite agree that the word "other" creates a difficulty, but I adhere to the view I expressed in the sodium phosphate case that the particular description "all synthetic organic chemicals" cannot be cut down or defined by the more general words "all other fine chemicals." I therefore decide that oxalic acid manufactured by the formate process is properly within the Schedule. It is conceded that the acid imported into this country is all manufactured by this process. I therefore award that the complaint fails.

Cinchona Cultivation

THE value of quinine in cases of fever has been so amply proved during the last fifty years since the cultivation of cinchona in India was first introduced, that it is not surprising to find that the Government of India are anxious to extend it, and that an experienced officer of scientific attainments and long medical service, Lieutenant-Colonel Gage, I.M.S., was deputed last year to tour in India and Burma with a view to find and select sites suitable for the extension of cinchona cultivation. After visiting and exploring many areas he came to the conclusion that there are only three which fulfil the necessary conditions. These are the Mikir Hills in Assam, the Anamalai Hills in South India, and a portion of the Tavoy and Mergui districts in South Burma. Testing these three localities with regard to the primary conditions for cinchona cultivation, Colonel Gage is of opinion that the Burma tract is easily first, and far superior to the other two. As an experienced officer of scientific distinction belonging to a different Service he inveighs against the system of shifting cultivation which prevails everywhere where there are wild tribes on the look-out for virgin soil, and who cannet as yet be induced to take up land for permanent cultivation. For political reasons it has not been considered expedient to bring pressure to bear on them to abandon their nomadic habits, but their uncontrolled system of cultivation causes greater and more lasting damage than many a jungle fire, while the revenue obtained is trifling. Colonel Gage says that he came across many areas which half a century or more ago would probably have afforded the requisite conditions for cinchona plantations he was in search of, but they had been ruined by the permicious system of shifting cultivation, by which enormous stretches of magnificent forest have been destroyed, and the surface soil exhausted and more or less washed away by the unimpeded rush of rain-water. Of the Chin Hills he writes: "Owing partly to the extensive destruction of the evergreen subtropical forest on the middle slopes and partly to the geological formation extensive landships have taken place, and are likely to continue to occur. On the middle slopes, denuded to a great extent of their original forest-covering, little surface soil has been left, and the substratum is either almost pure stiff clay or much disintegrated shale or coarse slate or a mixture of clay and shale. Owing to the destruction of the forest and to the nature of the soil there is little or no holding-up of water. The watercourses are few and-far between, are destructive torrents after heavy rain, and dry or scanty at other times. All along the outer ranges the ravages of shifting cultivation were only too evident. The evergreen forests are being rapidly destroyed."

Trade Report

The prices given in this section are those obtained by imporfers or manufacturers for bulk quantities or original packages. To these prices various charges have to he added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may he incurred in garhling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. bulk quantities.

42, Cannon Street, E.C.4, December 21

THE near approach of the end of the year and the holidays had led to an appreciable slackening off in business in the produce markets, which will be closed from Friday, December 22, until Wednesday, December 27. Shellac is an outstanding feature this week, and a considerable advance has taken place in all positions, the delivery market being 40s. to 50s. higher. More attention has been devoted to pepper of late, and forward prices are rather higher. Zanzibar cloves have been more freely offered at irregular prices, but generally easier. Ginger Japanese and African are slow and unchanged. Seeds are practically unaltered on the week. Menthol is quiet, with forward prices cheaper. Balsams are firm. Chinese galls and Mexican sarsaparilla are rather cheaper. Turpentine is flat and lower.

Higher	Firmer	Easier	Lower
Arsenic Cottonseed oil Formaldehyde Methyl alcohol Palm oil (hards) Pitch Pyridine Shellae Sodinm nitrate Soya-bean oil Turmer'c Zinc oxides	Acetic acid Coconut (desic.) (c.i.f.) Gum acac'a Lime oil Pepper (c.i.f.) Platinum Pot. permang.	Acid oils An'se, star oil, (c.i.f.) Benzols Bergamot oil Camphor oil Cass'a oil (c.i.f.) Cloves (Zan.) Menthol Mint oil (c.i.f.) Potash prinssiate Sodium prussiate Wax, veget, (Jp.)	Ammonia (anhydrous) (astoroil (Eng.) Dextrin (Dutch) Farina (Dutch) Spot) Ga'ls (Ch n'se) Glauber salt Lithopens Lubricating oils Methyl sulphonal Nickel su'phate Palmarosa cit Petroleum oils Rape oil (cr. and ref.) Soda hypo, Sulphonal Turpentine Vauillin

Cablegram

NEW YORK, December 21.—Business is quiet. Sodium benzoate has advanced to 65c. per lb. Senega is firmer at 77c., and cascara sagrada has advanced to 14c. Short buchu is higher at \$1.10 and quicksilver has advanced to \$72.00 per flask. Formaldehyde is dearer at 16c., and milk-sugar is also higher at 21c. per lb. Copaiba is cheaper at 28c.; serpentary root has declined to 85c., and Curação aloes to 6c. per lb.

Exchange Rates on London

The following is a list of Continental and other exchange rates against the pound sterling on London prevailing at 4 p.m. on Wednesday:

			December 13	December 20			
Paris, cheque		fr.	65.45-65.55	62.10-62.20			
Brussels, cheque		fr.	71.05 - 71.15	67.75-67.85			
Berlin		marks	36,57037,070	30.507-31,000			
Amsterdam, cheque		fl.	$11.6 \ 1-11.63$	11.6111.62			
Italy, sight		lire	92793	903-903			
Switz rland		fr.	24.48 - 24.53	24 4324.45			
Constantinople		pstrs.	730-820	780820*			
Madrid, sight		pes.	29.60 - 29.63	29.44-29.46			
Lisbon, sight		escudo	2 13 1 7 5 d.	2761211.			
Vienna		kr.	319-330,000	310 331,000			
Greses		dreh.	360 - 370	370 sellers			
Yokohama, T.T		yen	25 & 1.—25 ld.	25 td251d.			
New York, cable		\$	4.653-4.66}	4.60-4.60			
* Nominal.							

Crude Drugs, etc.

Annatio seed continues scarce and difficult to obtain. Shipments of both Jamaica and Madras prime seed are strongly recommended. The "tightness" is chiefly due to the partial failure of the Madras crop, owing to adverse

climatic conditions. New crop from Madras usually arrives at about this period, but of the Jamaica seed no shipments are expected before January-February. We understand that several parcels which were contracted for as prime seed have arrived, but they are of inferior quality, and as much as 33_3^4 per cent. allowance has been made to buyers. Unfortunately, this is no compensation as far as the user is concerned, as the seed itself is practically worthless for manufacturing purposes. Although c.i.f. prices are per-haps 2d. per lb. lower than spot values, buyers would be well advised to await the arrival of the new crop rather than take the risk of buying for shipment.

Antimony.—There is very little alteration, but the tone is steady, only a limited supply of English refined being is steady, only a finited supply of English refined being available, ordinary brands remaining at £27 to £29 10s. Foreign regulus on the spot is £25, but shipment could be had at about £22 10s. ('rude is neglected and nominal at about £17 10s. c.i.f. and £17 per ton on the

Areca.—With no first-hand supplies available, 37s. 6d. is asked for a few bags in second-hands.

Balsams.—Peru is firm at 8s. per lb. on the spot for genuine B.P. Tolu is also firm and scarce at 3s. 9d. per lb. Filtered Para copaiba is 1s. 8d. per lb.

Calabar Beans.—Sales ex store Liverpool are reported at 3d. per lb.

CAMPHOR (REFINED).—Japanese slabs are quiet, with small spot sales at 3s. 11d. per lb. To arrive, November-December shipment is quoted at 3s. 10½d. and January-February at 3s. 8d. per lb. c.i.f

CANNABIS INDICA.—Zanzibar good green has been in fair demand, and up to 1s. 4d. per lb. has been paid. Several lots of inferior quality are offering at 1s. to 1s. 1d. per lb., but without attracting buyers.

CASCARA SAGRADA.—The "Dinteldijk," from Seattle,

has brought 329 bags to London.

COD LIVER OIL .- As is usual at this period of the year, business is almost at a standstill, and prices are somewhat

DRIGONS BLOOD.—The "Agamemnon" has brought 33 cases from Singapore.

ERGOT.—Spanish or Portuguese is obtainable at 1s. 10d. per lb. on the spot,

GALLS.—Chinese are cheaper, plum-shaped offering at 67s. and ordinary shape at 62s. on the spot. To arrive, 58s. and 54s. 6d. per cwt. c.i.f. is quoted respectively.

GUM ACACIA is unchanged, Ko dofan ha'f-hard natural sorts selling at 80s., cleaned 90s. per cwt. To arrive, 63s. c.i.f. has been paid for January-February shipment.

HEN YOLK is firm, prime-quality Chinese liquid offering at 107s. 6d. per cwt. on the spot, and February-March shipment at 107s. 6d. c.i.f. For dried yolk 9½d. is quoted, sprayed yolk 10d. to 10½d., and native dried whole 8½d. per lb. Prime Chinese hen albumen is quoted at 3s. per lb. on the spot, December-January shipment at 2s. 11d. c.i.f., and March-April at 2s. 101d. c.i.f.

MENTHOL is quiet and the turn easier, spot sellers of Kobayashi-Suzuki quoting 41s. 6d. per lb. To arrive, November-December shipment is quoted at 40s. and January-February at 35s. c.i.f.

MERCURY.—There has been no important new feature. Current supplies are very moderate, and, in fact, continue rather on the light side, but, being well scattered, this largely accounts for the widely divergent prices heard of occasionally, between about £12 and £12 7s. 6d. per bottle. A fair quotation for spot lots is £12 5s. The home imports during November amounted to 1,739 bottles, against nil for the same month last year, the aggregate for the eleven months being 16,025 bottles, compared with 20.854 bottles for the same period of 1921. The arrivals in London for the week amount to 71,250 lb., and 30,000 lb. from Spain.

OPIUM.—This market is now closed for the remainder of the year; the spot price of good Turkey druggists' is about 15s. per lb.

CONSTANTINOPLE, December 12.—During the period November 23 to date, arrivals were as follows: Druggists' 1.152 cases, "softs" 82, Malatia 13. The stock was: Druggists' 237 cases, "softs" 120, Malatia 10. The following sales

have been made since our last report: 113 cases druggists at 1,350 to 1,450 piastres per oke, and 8 cases "softs," 2 at 1,400 piastres, and the remainder at 1,600 piastres, these prices being unchanged. At Smyrna, however, a new situation has arisen. As a result of forced sales, from 180 to 200 cases have been sold at prices even 20 per cent. below value. These last lots came partly from local stock already much restricted, and from goods brought by the proprietors, who had to realise at a sacrifice before leaving Smyrna at the had to realise at a sacrifice before leaving Smyrna at the behest of the Turk. Apart from the lots requisitioned by the State, the actual free stock in Smyrna is practically nul. The stock at Constantinople being to-day 367 cases, we obtained the total amount of primary the stock at Constantinople being to-day 367 cases, we net. The stock at Constantinople being to-day 507 cases, we estimate the total amount of opium at these ports and in Anatolia to be from 1,700 to 1,800 cases. In our opinion the above-mentioned decline can only be temporary, and we believe that the market will be firmly maintained for the following reasons: (1) The stock of 1,700 to 1,800 cases for eight months' consumption is not excessive. (2) Actual prices are no longer high. (3) Actual business indicates that consumption in Europe continues to increase. (4) Japan is likely to continue her purchases. It is equally necessary to take into consideration rumours regarding the crop, which certainly encourage speculation. In passing, we mention that alarmist statements of a few days ago in regard to severe frosts have been sufficient to influence holders, several

of whom have hesitated to sell.

The November issue of the journal of the British Chamber of Commerce of Turkey and the Balkan States, just to hand, intimates that the month has been marked by the continued intimates that the month has been marked by the continued demand on the Constantinople market and small arrivals, so that stocks, amounting to about 175 cases only, are the lowest recorded during the last two years. Prices in Turkish liras rose very considerably—good quality druggists from 1,250 piastres to 1,400 piastres per oke. Smyrna apparently is still not able to do any business. We expect, however, that, attracted by the high prices ruling here, merchants in the interior will do their utmost to get their opium down to Constantinople, so that arrivals may be larger and price. Constantinople, so that arrivals may be larger and prices may fall slightly. It is to be noted that, so far, sales have been far in excess of arrivals, and this has been marked even previous to the destruction of Smyrna. Up to the middle of October arrivals this year amounted to 1,300 cases and sales to 1,900 cases.

PLATINUM is again firmer, refined metal being called £22 10s. to £23 per oz., and raw £18 10s. to £19. There has been a steady demand.

Rubber.-Market is steady but quiet. During the past few days there has been a dearth of manufacturers' orders, and America has been holding back; in spite of this the market has not given way, and it is extremely difficult to find sellers of anything approaching a fair quantity at the current rates. We understand that there has been a steady demand for the lowest grades by France and Germany. Deliveries were better last week, viz., 914 tons; arrivals totalled 1,813 tons, with an increase of 872 tons in the stocks. Quotations (Wednesday, 5 p.m.): Standard No. 1 crêpe and ribbed smoked sheet, spot and December, 1s. 2d. per lb.; January-March, 1s. 2dd.; April-June, 1s. 2dd. to 1s. 2dd.; July-September, 1s. 3dd. Hard fine Para quiet at 1s. 1dd.; soft fine, 11dd.; Caucho ball, 11d. Balata is increasingly firm, and there are large buyers of Venezuela blocket 2s. 3dd. and W. Laberte 2s. 3dd. and W. block at 3s. 5d., and W.I. sheet at 3s. 9d. er lb.

Sarsaparilla.—Mexican is quoted at 1s. 6d. per lb. c.i.f. and at 1s. 7d. on the spot.

SHELLAC.—The movement of supplies into consumption has been fairly heavy this month, and more interest was centred on forward positions. The primary market has been very irregular but much firmer, and prices here are well up on balance in distant shellac. The statistical outlook is as strong as ever, and consumers are thus faced with stringent conditions, while this month's arrivals are likely to fall notably short of outgoings. The spot market for usual standard TN orange is about 20s. higher up to 370s. having been paid; good second orange is 400s., fine orange 460s., AC cakey 330s., and GAL 300s. For delivery the sales include December at 340s. to 380s., March at 307s. 6d. to 340s., and May 320s. to 330s. To arrive, TN for December-January shipment has been sold at 305s to 325s., and January-February shipment at 320s. to 322s. 6d. c.i.f.

STARCH PRODUCTS .- Japanese faring is quiet on spot at 14s. per cwt. Dutch is cheaper on the spot at 14s. 3d., and for December shipment 12s. 9d. per cwt. f.o.b. is quoted. English rice starch crystals is steady at 40s., and Continental is 34s. Maize starch powder is 14s. 1½d.

on spot. Dutch dextrin is lower on the spot at 23s. 9d. for superior and 20s. for No. 2. American maize is unchanged at 17s. 6d. per cwt.

TURMERIC is dearer, spot sellers of fair Madras asking 40s. per cwt. for a limited quantity. Bengal is unobtainable, and c.i.f. prices are too high to permit of business. Cochin split bulbs part wormy are offered at 17s. 6d. per cwt. in large lots and 18s. 6d. to 20s. for small parcels on the spot.

WAX, VEGETABLE.—Japanese is easier at 72s. 6d. on the spot, and for January-February shipment 70s. c.i.f. is quoted.

Seeds, Spices, etc.

Almonds.—Spot stocks of Sicilian have been reduced and cannot be replaced except at about 10s. per cwt. more. Shippers' prices after advancing recently have more. Shippers' prices after advancing recently have been maintained, bids being invited. Morocco are firm, but quality poor. Valencia have sold more freely, and Jordan have been inquired for.

Arrowroot is firm, with good manufacturing St. Vincent offering at from 53d. to 6d., and grozery 64d.

7d. per lb.

CLOVES have been in slow demand and easy at irregular prices, with spot sellers of fair Zanzibar at 8td. per lb. To arrive, the sales include October-December shipment at 7\frac{1}{4}\text{d}. to 7\frac{3}{6}\text{d}. c.i.f. January-March at 6\frac{7}{6}\text{d}. to 7\frac{1}{6}\text{c}. i.f. January-March at 6\frac{7}{6}\text{d}. to 7\frac{1}{6}\text{c}. i.f. and on were 1,711 bales, and deliveries 945, leaving a stock of 1.633 bales, against 2,126 in 1921, and 4,806 in 1920.

COCONUT (DESICCATED) is steady, with sales of fine at 36s. 6d., and medium at 36s. 9d. to 37s. per cwt. on the spot. To arrive, December-January, and January-Febru-

ary shipment is quoted at 37s. c.i.f.

GINGER is steady. Jamaica is offered at 160s. for small, and 190s. for bold. Fair washed rough Cochin is quoted at 57s. 6d., and wormy 45s. Brown bold rough Calicut is 62s. 6d., and ordinary 55s. Japanese is slow at 44s. Sierra Leone is 39s. in Liverpool, and 44s. in London.

Mace quiet, with fair to good Singapore offering at 1s. 6d. to 1s. 9d., ordinary 1s. 3d. to 1s. 4d., and pickings

at 1s. 2d. per lb.

Nutmegs.—Larger sizes have been in more inquiry of late but small are slow. Singapore, 110's, 10d. to $10\frac{1}{2}$ d.; 80's, 1s. $1\frac{1}{2}$ d.; 65's, 1s. $7\frac{1}{2}$ d.; West Indian, 100's, $8\frac{1}{2}$ to 9d.

PEPPER is firmer at 41d. per lb. for fair black Singapore on the spot. To arrive, January-March and February-April shipment has been sold at $4\frac{1}{16}d$. to $4\frac{3}{32}d$. c.i.f. Lampong is $4\frac{1}{16}d$. spot, Tellicherry $4\frac{1}{2}d$., and Aleppy 4d. spot. Tellicherry for January-March shipment is 38s. 3d. c.i.f., and Aleppy for January-March shipment 37s. 3d. c.i.f. White pepper is steady, the spot value being 6½d. To arrive, the sales include January-March shipment at $6\frac{1}{2}$ d., February-April at $6\frac{9}{16}$ d. to $6\frac{5}{2}$ d. c.i.f., and March-May at $6\frac{3}{4}$ d. c.i.f. Spot value of Singapore white is 6d., and January-March shipment is 53d. c.i.f. buyers.

PIMENTO is quiet, with sellers at 2\frac{1}{4}d. per lb. on the spot, and to arrive 19s. per cwt. c.i.f. is quoted. The week's deliveries were 144 bags, and the landings nil, lcaving a stock of 7,406 bags, against 23,554 bags in 1921, and 37,883 bags in 1920.

Essential Oils

WITH the approach of the holidays buying has virtually ceased and, except for one or two minor price changes, there is little to report. West Indian distilled lime oil is firmer. Star anise, Japanese mint and cassia are cheaper to arrive. Bergamot is easier. Fresh arrivals of camphor oil are offered at lower rates. New crop palmarosa oil is cheaper in course of landing.

Ansaged at 2s. 2d. per lb. The price to arrive is nominal at 1s. Ild. c.i.f.

BAY.—West Indian is quoted at from 10s. 6d. to 11s. per lb. Small lots may still be obtained at 10s.

BERGAMOT is easier for shipment at 13s. per lb. c.i.f. for 37 to 39 l.a. and 13s. 6d. to 13s. 9d. on the spot.

Bois DE Rose (Femelle) is unchanged at 9s. 6d. to 10s. per lb., according to seller.

CAMPHOR.—White essential is cheaper for cases landing at from 80s. to 85s. per cwt.

Cassia is quiet at 9s. to 9s. 3d. per lb. for 80 to 85 c.a., and for shipment 6s. 7½d. to 6s. 9d. c.i.f., which is easier.

CINNAMON.—Ceylon leaf is quoted at 41d. per oz. on the spot and 3 gd. c.i.f.

CITRONELLA.—Ceylon is quiet and unchanged at 2s. 42d. to 2s. 5d. per lb. for spot and 2s. 32d. c.i.f. Java is steady at about 3s. 3d. per lb. spot. For shipment 3s. 22d. c.i.f. is quoted.

GERANIUM. - Spot sales have been made at 26s. per lb.

for Boyrbon.

LAVENDER.—French oil is quiet and unchanged on the spot at 11s. 6d. per lb. for 36 per cent.; for 40 per cent. 13s. to 14s. is quoted.

LEMON is quiet and unchanged at 2s. 8d. to 2s. 10d. per lb. on the spot and 2s. 7d. c.i.f.

LEMONGRASS.—Cochin is quiet and unchanged at $2\frac{1}{2}d$. per oz. on the spot and $2\frac{1}{4}d$. c.i.f. to arrive.

LIME.—West Indian distilled is firmer at from 2s. 41d.

to 2s. 6d. per lb.
MINT.—Japanese dementholised Kobayashi-Suzuki is nominal at 8s. per lb. on the spot and 7s. c.i.f.

ORANGE.—Sicilian sweet is unchanged at 8s. 6d. to 9s. per lb. for spot and 7s. 6d. c.i.f.

PALMAROSA.—For shipment landing 17s. per lb. is quoted in original pots. Spot sales have been made recently at 17s. 6d. in pots.

PATCHOULI.—Penang varies according to seller at from

30s, to 35s, per lb.

PEPPERMINT.—American natural tin oil is steady at from 13s. to 13s. 6d. per lb. on the spot. Dutch B.P. rectified is selling at 10s. 6d.

Pharmaceutical Chemicals, etc.

THE volume of business in this market has been rather limited this week and will remain so until after the holidays. Quite a steady tone is maintained, and there is little change to record. Sulphonal and methyl sulphonal are cheaper. Hexamine is in good demand and a rising market.

ACETANILIDE on the spot is offered by holders at from 1s. 4d. to 1s. 6d. per lb. as to quantity; the price for forward delivery may be somewhat cheaper.

AMIDOPYRIN remains practically idle with the declared

value nominal at 14s. per lb.

ASPIRIN is firm on the spot with importers of recognised Continental brands selling freely at 2s. 9d. to 2s. 10d. per lb. Similar to benzoate of soda, the German Convention has reduced the price temporarily to 2s. 6d. per lb. f.o.b. Hamburg.

Barbitone is fully maintained at the advanced rate of 12s. 6d. per lb. given last week. Spot supplies are scarce.

Benzaldehyde (.03) is steady, but in no great demand at 3s. per lb.

BENZOIC ACID varies on offer for forward delivery from

1s. 11d. to 2s. 1d. per lb.; the spot price in some quarters is still quoted as at 2s.

Bromides.—The lower prices given last week had the effect of steadying the market somewhat, but even now parcels can be obtained at very cheap rates. The demand remains slow. Ammonium, from 8d. per lb.; potassium, crystals and granular, from 7d. per lb.; sodium, crystals and granular, from 7½d. per lb., according to quantity.

The position of bromides in Germany is decidedly strong. The available stock of good quality, which for some time was a glut in the market, has been absorbed. Though there are still a few oddments in the market, the quality is said are still a rew outments in the market, the quality is said not to be up to standard on account of age and bad warehousing accommodation. The comparatively low prices still quoted for these parcels are therefore no criterion of the present market condition in Germany. Manufacturers quote 1s. 3d. per kilo for potassium bromide, and 1s. 4d., per kilo for ammonium and sodium bromides, but these prices may be advanced shortly.

CALCIUM LACTATE continues to meet with a fair inquiry, and is steadily quoted in the region of 2s. 3d. per lb.

CHLORAL HYDRATE is unchanged on the week at about 4s. and upwards per lb. for duty paid material. There is no great demand.

CITRIC ACID.—Spot offers for B.P. crystals are in the region of 1s. 8d. per lb., and for forward delivery 1s. 7d. per lb. is quoted. There is reason to believe that forward orders could be placed at even cheaper rates than those

COUMARIN.—Spot sales have been made at 10s. 9d. per lb. on the spot.

CREOSOTE B.P. is quoted by importers in the region of 2s. 6d. per lb.

CREOSOTE CARBONATE remains dull, with the declared value about 10s. per lb.

GUAIACOL CARBONATE continues in very poor demand, with offers easy at about 8s. to 8s. 6d. per lb.

HEXAMINE.—The market is exceptionally strong, and there are a good many export inquiries, which, however, cannot all be executed, as the limits are not sufficiently inducive on a rising market. Spot sellers quote fully 3s. per lb. The position in Germany is equally firm. German manufacturers are now quoting 2s. 4d. to 2s. 6d. per lb. for limited quantities, but large orders cannot be executed by the works, as the output is restricted and the works fully booked up for some time ahead.

HYDROQUINONE is dull and easy at about 3s. 6d. per lb. MERCURIALS.—Business is reported satisfactory at higher prices, on account of the firmer tendency of mercury, and manufacturers are said to he well booked up. Keen competition from Germany, however, for reasons of the high cost in the purchase of quicksilver abroad, together with the heavy overhead charges, apart from the 33½ per cent. duty under the Safeguarding of Industries Act, need hardly be feared.

METHYL SALICYLATE has been in fairly good demand at 2s. per lb. for cwt. lots.

METHYL SULPHONAL has dropped back again and is now offered on spot in the region of 14s. per lb.

PARAFORMALDEHYDE is unchanged on quotation from 2s. 9d. per lb. upwards.

PARALDEHYDE is fully maintained from 1s. 4d. to 1s. 6d. per lb., with the market rather quieter.

PHENACETIN is a healthy market with prices well held at 4s. 9d. to 5s. per lb. on spot.

PHENAZONE has not been active and the price is unchanged at 6s. 9d. to 7s. per lb.

PHENOLPHTHALEIN is meeting with a continued demand and the price is firm at 5s. to 5s. 3d. per lb.

Potassium permanganate is a shade firmer this week on spot, and the general price asked for B.P. is about 73d. to 8½d. per lb., as to quantity.

RESORGIN remains flat with the declared value at about 5s. 9d. per 1b.

SALICYLIC ACID has been in limited demand, with the price round about 1s. 4d. per lb. for B.P.

SALOL remains dull, with spot offers at about 2s. per lb. SODIUM BENZOATE is steady at 1s. 10d. per lb. with the demand much smaller. The German Convention decided at their meeting last week to reduce their price to 1s. 4d. per lb. net f.o.b. Hamburg against their previous price of 1s. 9d. per lb. This reduction is only in respect of available parcels, and it is already indicated that prices will again before long be at their former level, as the cost of production has considerably advanced. The price of 1s. 4d. per lb. f.o.b. Hamburg will therefore only hold good as long as the stock will last.

SODIUM SALICYLATE is firm at the prices last quoted; powder, about 1s. 10d., and crystals, 1s. 11d. per lb.

SULPHONAL is cheaper on the week, with spot offers easy at 13s. per lb

TANNIC ACID.—On the spot leviss B.P. is offered at about 3s. 6d. per lb., but little business has been done at that rate.

TARTARIC ACID is rather on the firm side at from 1s. $1\frac{3}{4}$ d. to 1s. 2d. per lb. on the spot.

TERPENE HYDRATE is quiet but steady at about 1s. 9d.

THYMOL is nominally declared at 20s. on an idle market. VANILLIN is cheaper on the spot with sales of cwt. lots at 24s. per lb.

Industrial Chemicals, etc.

London, December 20.

A NUMBER of important changes have taken place during the week, as shown in the report given below. Acetic acid is on the up grade. Arsenic is hard to find at any price. Zinc oxides have advanced considerably. Clauber's salt is cheaper. Hypo soda pea crystals are cheaper on spot. Some makers' prices for New Year entracts are given.

ACETIC ACID has been tending firmer all the week, and the reports to hand from American shippers show their offers to be moving in the same direction. On spot, 80 per cent. technical is £42 to £43; 80 per cent. pure, £43 to £34; 98 per cent. glacial, £65 per ton, in casks and demijohns, ex wharf, London.

ACETONE.—British Government specification £130 per ton, in drums. The spot price is fully maintained with little available, and the forward position unpromising.

ALUM.-Lump in bags is offered on the Continent at £11 per ton f.o.b. The spot price is £13, with little doing.

Ammonia (anhydrous) is cheaper at 1s. 6d. per lb. for 99.95 per cent., but there is little doing, as is to be expected at this time of the year.

Arsenic.—The position for supplies is critical. Cornish mines will not quote for January; their price for immediate despatch is £65 per ton f.o.r. Cornwall. It looks as if this price will advance for January and onwards. Belgium is quoting at £30 for prompt shipment and £70 for January. Hamburg quotations are at £66 f.o.b. Japanese is offered at £51 10s., with delivery next October-November. There is plenty of inquiry on the market. but buyers seem to be unwilling to pay the present high

BARIUM CHLORIDE for forward delivery is offered at the cheap rate of about £18 per ton c.i.f. for 98 to 100 per

BLEACHING POWDER is offered on the Continent at cheaper prices than the spot price of about £11 per ton for 35 to 37 per cent.

COPPER SULPHATE.—The tendency has been more uniformly firm, with a fairly active export demand for the Continent. There are now but few makers willing to accept £27 for casks f.o.b., less 5 per cent., and £26 10s. Continental prices are £26 to £26 10s. per ton in bags. f.o.b. The more general quotation is £27 10s., while up to £28 is asked. The much stronger appearance of the market in bar copper and the fact that scrap metal suitable for sulphate making is extremely scarce is influencing manufacturers in their stiffer attitude. Last month's shipments made a good showing, amounting to 2,282 tons, against only 710 tons for November last year, and the total for eleven months represents 40,926 tons, which compares with 25,514 tons in the same period last year.

CREAM OF TARTAR holds steady on spot and forward delivery at about 93s. per cwt. for B.P. in ton lots. Small parcels are quoted at 93s. 6d. to 94s. on the spot.

EPSOM SALTS are seldom called for; commercial quality in bags is on spot at about £6 to £6 5s. per ton.

FORMALDEHYDE is dearer again this week, and the market is firm at £90 per ton for 40 per cent. volume, ex wharf, London.

GLAUBER'S SALT is much cheaper, with commercial quality offering at £3 10s. to £4 per ton in bags, but there is little demand.

LEAD PRODUCTS.—Importers' prices are as follows: Lead acetate, brown broken, £34; white crystals, £37 per ton; red lead, £32 10s.; white lead, £36 per ton. c.i.f. London.

LITHOPONE is cheaper, with 30 per cent. Continental red seal offered at £21 to £21 10s. per ton.

NICKEL SULPHATE.—British makers' prices are

reduced very materially home and export, single and double salts, £40 per ton, delivered and f.o.b. respectively.

OXALIC ACID is steady at 7d. per lb. The Referee's decision in the appeal case heard last November was given on Tuesday to the effect that the complaint that oxalic acid has been improperly included in the lists of articles chargeable with duty under Part I. of the Safeguarding of Industries Act, fails and the duty holds. (See p. 908.)

Potash caustic (88 to 92 per cent.) from dealers is firm at £29 10s. per ton, owing to Continental quotations being fully maintained.

POTASSIUM CARBONATE has been in restricted demand, with dealers offering at £27 for 90 to 92 per cent. and £30 to £31 for 96 to 98 per cent.; spot stocks are now quite small.

Potassium chlorate is unsteady on spot, with a tendency to cheaper rates. The declared value is about $3\frac{3}{4}$ d. per lb.; forward offers are cheaper.

Potassium prussiate is perhaps a shade easier, with some spot offers at 1s. $5\frac{3}{4}$ d. per lb.; others are maintained at 1s. 6d. per lb.

SALTCAKE for New Year delivery is quoted at about £4 10s. per ton, but British makers will not have much to offer.

SAL AMMONIAC is a shade cheaper this week as offered by dealers, who find business very limited: dog-tooth crystals, 50s.; medium, 45s.; fine white, 29s. to 30s. per

Soda ash on the spot in London is quite neglected with the declared value at £9 per ton; Manchester, £8. British makers' prices for the New Year for home trade only are from £7 12s. 6d. to £8 5s. per ton.

SODA CAUSTIC is slow of sale, with dealers' prices unaltered at: 70 to 72 per cent., £19 10s.; 76 to 77 per cent., £21 10s. per ton, ex wharf, shipping port. British makers' price for 1923 for 76 per cent. is from £20 10s. to £21 10s. per ton.

SODIUM BICARBONATE is offered on spot in small lots at about £10 5s. per ton.

SODIUM BICHROMATE on the spot is dull with the price at about $4\frac{1}{2}$ d. to $4\frac{3}{4}$ d. per lb.

Sodium hyposulphite has been in fair demand on spot, with pea crystals packed in one-cwt, kegs offered at £16 to £16 10s. per ton.

SODIUM NITRATE has improved both in demand and in price, with the rate at £13 per ton for 96 per cent., f.o.r. Liverpool. At a meeting held in Valparaiso the Asociacion de Productores do Salitre do Chile made the following increase in their selling prices per metric quintal for nitrate of soda, f.o.b. Chile, for May and June 1923, delivered :--

		New price	Old price
May	 	20s. 8d.	19s. 7d.
June 1-15	 	20s. 8d.	18s. 6d.
June $16-30$	 	19s. 1d.	18s. 6d.

Sodium prussiate is again this week a shade cheaper on spot at about 10½d. per lb.

Sodium sulphide has eased off a little, with 60 to 62 per cent, solid offered at £16 10s, and broken at £17 10s, per ton in drums. There has not been much inquiry of late.

ZINC OXIDES.—British makers report a further sharp advance in prices, due to the high price of spelter. B.P., £52 10s.; white seal, £45 per ton, f.o.r. works. Spelter will have to cheapen considerably before the price of oxides fall at all, as the makers now say they are at below costs of production.

COAL-TAR PRODUCTS, ETC.—Further advances in a number of products are recorded this week. Pitch, pure methyl alcohol and pyridine continue to move on upward grade. Benzol is at slightly cheaper rates. Other products are unchanged on the week. Business has been limited. Anline oil and salt are unchanged at about 11d. per lb., packages free, with the market still ide. Betanaphthol is declared at 1s. 4d. per lb., with little or no inquiry. Pirch in London is firm at the better price of 120s per ter and business; a good. price of 120s. per ton, and business is good. PURE METHYL ALCOHOL continues to advance, and the offers in London are about £110 to £115 per ton. position in America shows no sign of easing. Carbolic ACID CRYSTALS are firm at 8½d, per lb., with quite a good inquiry; supplies here seem short. Creosote oil is steady at about 7d. per gallon, barrels free. Pyridine is firm

at the higher price of 8s. per gallon. Hexamethylene is steady at 2s. 10d. per gallon on a quiet market. Naphthalene is steady at £17 per ton; crude, £5 to £8 10s.; crystals, £16; powder, £16; balls, £24; candles, £34; tablets, £34 per ton, packages free. Disinfectants, 3s. 9d. per gallon, barrels free.

Fixed Oils, etc.

LINSEED OIL keeps fairly steady, but is not in much demand. Turpentine continues to fall in value on an inactive market. Cottonseed oils are still meeting with brisk business on an advancing market. Other products are about the same on the week with business rather quieter. ACID OILS.—The market has been much quieter and prices have gone in buyers' favour a little; coconut, 34s.; palm-kernel, 33s. 6d.; groundnut, 34s. 3d. Castor ott.—Hull make is £1 per ton lower for spot to April delivery: Pharmaceutical, 52s.; first pressings, 47s.; second pressings, 44s., ex mills Hull for not less than one ton lots. Coconut oil.—After a fair spel of good buying has slackened off very much, but so far prices are maintained, but they are not firm; dcodorised, 45s.; Ceylon, 43s.; Cochin, 47s. Cottonseed oil.—Further advances in the price of all grades is recorded, and with the market active the tone at the close is firm; deodorised, 46s.; common edible, 43s. 6d.; soapmaking, 41s.; crude, 37s. Groundnut oil.—A steady tone is maintained with prices level on the week; deodorised, 51s. 6d.; crude Oriental, 45s. Linseed oil (raw naked).— A fair business was done early in the week, but a much quieter tone has since governed the market. Prices are so far steady, as quoted. On spot, 39s. 3d.; December, 38s. 3d.; January to April, 35s. 3d.; May to August, 32s. 3d. Hull, on spot, 39s.; December, 39s.; January to April, 35s. 3d. May to August, 32s. 3d. The position at Hull is tight, this also referring to the seed, of which only some 18,000 tons are affoat to this country. The heavy delay likely to be experienced in the new crop shipment from the Argentina has been made the most shipment from the Argentina has been made the most of by shippers of old crop, while the surplus of the latter has been almost wiped out. Private estimates of the River Plate export surplus of new crop now vary down to about 1,300,000 tons, although the official estimate stands at over $1\frac{1}{2}$ million tons. It is claimed that the crop has suffered from heavy rains during the harvest, but this is contradicted by certain trade authorities. Palm-kernel oil holds very steady, and prices are fully maintained; deodorised, 43s.; crude is slightly dearer at 36s. 9d. Palm oil.—There is a good call for hards with little to offer the price is up to 36s. on a firm market. little to offer, the price is up to 36s. on a firm market. Lagos at 34s. 4½d., and softs at 34s. have been in much quieter demand. RAPE OIL.—A quiet tone prevails here and prices are 2s. per cwt. lower; refined, 45s., and crude, 42s. Soya BEAN OIL.—Deodorised has been in good demand and is firm at the advanced rate of 46s.; crude Oriental, c.i.f. for shipment is unchanged at about 36s. 6d. Turpentine (American) continues on the downward grade with practically no business on the market. The closing prices were far from steady. On spot, 94s. 6d.; January-April, 96s. Total visible stocks now amount to about 13,300 barrels in London. Wood OIL.—Chinese is firm at 72s. 6d. per cwt. for Hankow in barrels on the spot, and at 67s. per cwt. c.i.f.

Lubricating, mineral and burning oils, etc.—Benzol is offered at cheaper rates this week. Lubricating oils have cheapened on account of the improvement in sterling on the American exchange. Other products are about the same with business generally restricted. Benzol is a point cheaper this week with the price quoted at 1s. 7d. per gallon, f.o.r. makers' works. Demand is small. Burning oil.—Crude No. 3, 8½d.; No. 2, 8d. per gallon, barrels free; there is no change to record. Fuel oil.—895 to 910 gravity, £4 2s. 6d. per ton, ex wharf for Diesel; 950 gravity, £3 5s. per ton, ex tank. Gas oil has been reduced by ¾d. per gallon to 4½d. per gal'on net, and naked ex wharf. Naphtha has been very quiet, but the price is steady at 1s. 9d. per gallon, naked. Solvent naphthas are well maintained at the better rates given last week; 90 to 160, 1s. 9d.; heavy, 90 to 190, 1s. 8d. per gallon, drums entra. Parafein wax and scale.—Wax stands very steady at 2¼d. to 3d. per lb., in bags.

according to melting point. Scale holds firm, with 122 deg. to 124 deg. Fahrenheit, on spot, 1\frac{3}{4}d., and c.i.f., 1\frac{5}{8}d. per lb. Petroleum oils.—American water white, 1s.; American prime white, 11\frac{1}{2}d., in barrels, net; Russian prime white, 10d., in barrels; 7d. naked, ex tank, and 7\frac{1}{4}d. filled free, buyers packages. Petroleum Jelles.—Some slight alterations in price for spot goods are recorded; snow white, \mathcal{L}64; white B.P., \mathcal{L}60; yellow, from \mathcal{L}23; to \mathcal{L}45; red vet., \mathcal{L}20; ruby red, \mathcal{L}21; dark stiff green, \mathcal{L}14, barrels free, ex wharf, London. Special Oil for Diesels and motors, 10d. per gallon, barrels free; the position is as last reported. White oils.—Special No. 1, \mathcal{L}43; No. 1, \mathcal{L}40, in drums; No. 2 half-white, \mathcal{L}27 per ton, barrels free, ex wharf, London. Lubricating oils.—Spot prices have been reduced as follows: Pales and reds, 10s. to 30s.; blacks, 5s. to 30s.; dark cylinders, 10s. to 35s. These reductions are due to the improvement in the value of sterling. Shipment market continues quite steady, pales, \mathcal{L}10 to \mathcal{L}22; reds, \mathcal{L}13 to \mathcal{L}25; dark cylinders, \mathcal{L}18 to \mathcal{L}27; filtered cylinders, \mathcal{L}18 to \mathcal{L}25; dark cylinders, \mathcal{L}18 to \mathcal{L}27; filtered cylinders, \mathcal{L}18 to \mathcal{L}25; dark cylinders, \mathcal{L}18 to \mathcal{L}27; filtered cylinders, \mathcal{L}18 to \mathcal{L}25; dark cylinders, \mathcal{L}18 to \mathcal{L}27; filtered cylinders, \mathcal{L}18 to \mathcal{L}25; dark cylinders, \mathcal{L}18 to \mathcal{L}27; filtered cylinders, \mathcal{L}18 to \mathcal{L}25; dark cylinders, \mathcal{L}18 to \mathcal{L}27; filtered cylinders, \mathcal{L}18 to \mathcal{L}25; dark cylinders, \mathcal{L}18 to \mathcal{L}27; filtered cylinders, \

French Chemical Market

Paris, December 18

The frequent wild oscillations in the franc rate of sterling have certainly not facilitated the negotiation of new business in the French chemical market, while trade buyers are unmistakably up against a period of inflated prices. Seed oils generally, as well as other descriptions of fats, have been more especially affected by the rise in sterling; prices, indeed, having been lifted very considerably. Those products used for manufacturing margarine, soaps and waxes, have also tended upwards. Sulphuric acid has likewise shared in the upward movement under an increased demand. The rate of the lira having also advanced more or less in proportion with that of the franc in relation to sterling, increased prices for Spanish and Italian pyrites have been adopted by producers. Chilian nitrate of soda, and ammonium sulphate, have shared in the advance, and a rising market is spoken of for nitric acid, albeit the trade demand still remains light. In those articles used for paints and varnishes there has been some weakening except for zinc and lead-salts. Sodium sulphate and bichromates have displayed great firmness, which is largely explained by the large quantities which are being imported. The amount of business in pharmaceutical products has remained restricted, and trading in German material is becoming more difficult. The following quotations are representative of the markets:—

representative	of the marke
Kilo (except whe	
state	1).
Ammonium carb.	
Engl., per 100	
kilos	240 to 250 fr.
kilos Antimony, white	
oxide pulv	1.60 to 1.70 fr.
Antinumino	520 m.
Amapyine	320 III.
Antipyrine Arsenic, white	7 00 to 7 20 fm
purv	3.00 to 3.20 fr.
Benzonaphthol	
(lb.)	6s.
Bismuth salicy-	
late	57 fr.
late Bismuth sub-	
nitrate	80 to 85 fr.
Boric acid cryst. 1	1.20 to 11.50 fr.
Caffeine (lb.)	15s, to 16s,
Chloral hydrate	12,50 fr.
Chloreform	10 to 19 fr.
Chloroform	12.50 fr.
Citric acid	12.50 11.
Cocaine hydro- chlor.	1 555 (-
chlor Codeine1,	1,575 fr.
Codeine1	,559 to 1,595 tr.
Copper sulphate (per 100 kilos)	
(per 100 kilos)	145 to 155 fr.
Creosote (lb.)	3s.
Digitalin cryst.	
	125 fr.
Formic acid,	
chem. pure	3.50 to 4 fr.
Glycerophos-	0.00 00 111.
phate, lime (lb.)	7s. to 8s.
Glycerin	5.20 to 5.50 fr.
	65 fr.
Gnaiaco cryst	170 to 175 fr.
Iodoform	110 (0 11511.
Iodoform Lithopone, red	7 404 7 450
seal	1.40 to 1.45 fr.
seal Magnes, sulphate	1.20 to 1.25 ir.
Methyl salicylate	
(lb.)	2s.
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Kilo (except wh	
stated	1).
Morphine hydro-	**
oblor	800 to 820 fr.
chlor Nickel oxide	
Nickel oxide	11.90 to 12 fr.
Nitrie acid, ord.	95 to 118 fr.
Phenacetin	550 m.
Phenolphthalein	40m.
Potass, bromide	8 to 8.50 fr.
Detass, bronning	0 00 0.30 11.
Potass. caustic,	
Potass, caustic, 88–92°, Engl.,	
a ton	£29 to £30
a ton	2.30 to 2.50 fr.
Potass, iodide	93 to 95 fr.
	30 to 33 H.
Potass, nitrate (per 100 kilos)	1004-1006-
(per 100 knos)	160 to 165 fr.
Potass, permang,	6,80 to 7 fr.
Pyramidon	1.850m.
Quinine sulphate	3.40 to 3.45 fr.
Salicylic acid :	165m.
Sodium arsen	3,50 to 3,60 fr.
Codium discut	0.50 to 0.00 ft.
Sodium bicarb	0.70 to 0.80 fr.
Sodium borate	2.20 fr.
Sodium sulphate	0.13 to 0.26 fr.
Sodium benzoate	55m. to 60m.
Sodium cadocy-	
late	130 fr.
late Sodium methyl	130 11.
Socium metnyi	2 000 2
arsenate	6,000 fr.
Sodium salicylate	180m.
Sodium phosphate	6.50 to 7 fr.
	1.45 to 1.50 fr.
Solvent, naphtha	1.45 (0 1.50 11.
Sulphuric acid ord, (per 100	
ord, (per 100	
kilos)	15 to 27 ir.
Sulphuric acid.	, ,
pure (per 100	
kilos)	135 to 138 fr.
Tartaric acid,	
	0.40 10.60
pwd. cryst	9 to 10 fr.



Letters for this section should be written on one side of the paper only. The writer may adopt an assumed name for purposes of publication, but he must in all cases furnish his real name and address to the Editor.

Glaxo-Price Scheme

SIR,—Every thoughtful pharmacist will appreciate the fact that Glaxo is now not only really protected, but its sales are confined to chemists. Such action is, I believe, unprecedented. Certainly I do not know of any largely advertised proprietary which is confined to chemists, and one sincerely hopes the precedent established will be largely followed. When one sees travellers from houses of distinction, the heads of which are qualified chemists, calling upon second-rate drapers with their perfumery and toilet goods it makes one's blood boil. The suggestion that the movement is a staggering blow to the Proprietary Articles Trade Association is puerile. If the defection of one big firm is to shake this Association's falric, then its foundations are on sand. If, however, it awakens these smug, self-satisfied individuals from their sannolence so much the better. Bravo, Glaxo! I have always shown and pushed your goods, and shall be more enthusiastic now than ever.—Yours, etc.,

SIR,—I see from your correspondence column that certain aspects of the Glaxo controversy are being discussed. I think that it is well that I should make the following statement on behalf of the wholesale members of the Proprietary Articles Trade Association. These comprise practically the whole of the houses who handle prietary articles sold through the drug trade, and include many whose connection with retail pharmacists has for many years worked with such advantage to the trade in general. The local chemists' associations have already had copies of the correspondence which has passed between the P.A.T.A. and the Glaxo Company, prior to Glaxo coming off the protected list. Since that date, further negotiations have taken place. The company apparently decided in any change made necessary in their method of distribution by the removal of Glaxo from the protected list, to take the opportunity of altering their trade terms, in other words, to increase their bottom price to the trade so as seriously to diminish the margin of profit divisible between the wholesaler and retailer. the scheme they take for themselves part of the traders' former profit. In negotiations, the company proposed in the first place to prevent the majority of the wholesalers, through whom pharmacists have in the past purchased their Glaxo when, and in such quantities as they found convenient, from trading in Glaxo in the future. They proposed to select a few of the wholesale houses, who were members of the P.A.T.A., to be added to their special agents, as wholesale distributors of Glaxo, and to allow these wholesalers 5 per cent. gross profit, subsequently increased to $6\frac{1}{4}$ per cent., and later the proposed restriction in regard to the number of P.A.T.A. wholesalers was removed. The company further indicated that, under the scheme, they would, at their discretion, offer certain traders a bonus for advertising or window display purposes, but the P.A.T.A. have always regarded these advertising or window display bonuses as something apart from remuneration for acting as distributors. However, the bonus scheme might develop, the fact remained that the profit on sales as a remuneration for distributing was to be much reduced. The wholesale members of the P.A.T.A, submitted to the executive that it was impossible for them to distribute Glaxo in broken parcels, that is, in half or quarter dozens, etc., at a gross profit of $6\frac{1}{4}$ per cent. Finally the Glaxo Company modified their scheme by announcing that they would withhold supplies from grocers and others not in the drug trade. executive are satisfied that wholesalers cannot do the Glaxo business at a gross profit of 64 per cent. The retail section of the council have also unanimously passed the following resolution :-

That this meeting of the Retail Section of the P.A.T.A. regrets the position that has arisen with reference to Glaxo, and asks, now that the company has decided to maintain an adequate retail price for their article, that the company should again consider the question of protecting Glaxo through the P.A.T.A., allowing the wholesalers such profit as will enable them to distribute.

The P.A.T.A. have never suggested to the Glaxo Company or to any other proprietor that they should confine the sales of their article to pharmacists. The trade can have no confidence in the permanence of an arrangement whereby the sales of a dried milk, advertised foramongst other purposes—the making of puddings, can be upon the legitimate drug trade. The scheme quite unnecessarily causes inconvenience to the retail pharmacists, who, instead of obtaining Glaxo as of old through their normal wholesalers, are to open fresh and separate accounts with strange firms, of whom, perhaps, they have never heard. If all, or even a large number of proprietors followed the Glaxo example, the trade in proprietaries would become well-nigh impossible for the average retailer, who is, after all, the first concern of the P.A.T.A. It should be noted that all the P.A.T.A. asked was that the wholesale channels through which the grocers obtained their supplies should be cut down to a minimum, and that the goods should be ciphered so that the house through which a cutter obtained his goods could be ascertained. The wholesalers exceedingly regret that the Glaxo Company find themselves unable to work their price-maintenance scheme through the P.A.T.A. It is clear that if any scheme for the maintenance of the retailers' profit is to be permanent, the wholesalers must not be asked to handle the article at a loss. The P.A.T.A. scheme has succeeded because it has consisted of a partnership between (a) the makers, (b) the wholesale, and (c) the retail distributors, who have each had a mutual interest in the maintenance of the scheme. Apart from considerations of justice, the principles upon which the Glaxo scheme is based are so unsound that, whatever may happen in the immediate future, it cannot permanently succeed. No scheme of price protection is sound in which the distributors, as such, have no voice or control. Under the Glaxo proposals, the proprietors may vary their scheme at any time without any consultation with the accredited representatives of either section of the The statements in the circulars issued by Glaxo on this matter are calculated to antagonise retailers against wholesalers. The suggestion that the cutting of the article by grocers is due to wholesale druggists is without the slightest warrant. The pushing of the sale of Glaxo amongst grocers and others outside the drug trade has been done by Glaxo themselves. The trouble would have been averted if the Glaxo Company had adopted the suggestions made to them by the P.A.T.A. council, strongly supported by P.A.T.A. wholesalers. The inconvenience caused to our retail customers by this scheme has been created by the company alone. Their present has been created by the company alone. Their present pose of being the friend of the pharmacist they may regard as a good business move. I am confident that the friendly relationship and co-operation which existed between wholesalers and retailers in the drug trade before Glaxo was known, will not be sacrificed at the bidding of any individual firm. A letter from the wholesale section of the P.A.T.A. would, under ordinary circumstances, have been signed by Mr. F. J. Smith, as chairman of that section. The position of Mr. Smith's firm, however, as wholesale distributing agents under agreement with the Glaxo Company for a number of years, renders their position entirely different from that of other whole salers. Mr. Smith has satisfied his colleagues as to that position, has done everything he can to prevent the impasse being reached, and to negotiate terms which would prove satisfactory to his fellow-wholesalers. Further, Mr. Smith's firm desire to be entirely loyal to their colleagues, and do not wish, whilst the present difficulty continues, that any unfair advantage in other ways should accrue to them owing to the favoured position they occupy in regard to Glaxo. Yours faithfully,

W. C. Birks, Vice-President, Proprietary Articles Trade Association.

The late Thomas Ashby Jeffrey

SIR,-One of the few remaining links with the past disappears with T. A. Jeffrey, dead at the ripe age of eighty-six (t'. & D., December 16, p. 851). I do not know how the business of Russell Jeffrey & Son was affected by the "company" incursion, but, as I remember it, it was as nearly ideal from the pharmacy point of view as a place could well be. An orderly and well-arranged shop and laboratory; enough of work in pharmacy operations and dispensing to satisfy any intelligent and enthusiastic worker. Jeffreys must have put the finishing touches to many a young chemist. No cue could fail after a term of years here to be well equipped for any position. There are-I imagine-not many of these educational pharmacies left. We imagined them, in our innocence, to be of the gold mine order, but learn later that a lot of dispensing must be done before you see the colour of gold. But for the indoor system where would such businesses have been? Jeffreys was one of those early photographic depôts—cameras made on the premises. There used to be remnants and old stocks of these, and dishes and baths and such-like reminders of wet collodion days. And in the post office department rumour went back to the days when stamps were separated with scissors. We despatched telegrams with one of the alphabet magnetic instruments, one hand turning the handle and the other manipulating the letters. I used one of similar type at Corbyns in London. Dispensing was not quite in the same style as now; no reputable chemist tampered with formulas or gave other than the best, but more than one pharmacopæia had to be considered; 1867 followed closely on 1864, and the reign of the former was not absolute. There was no Government interference for some years in this department. I fear the company octopus badly interfered with this class of pharmacy, and the end is not yet. The profits were never great, but tempting to a certain class—for a time. The drug trade has been trampled under foot by companies, which after all the trapplet and foot by companies, which, after all the trouble and havoc wrought, find little profit in it to satisfy their capacious maw.—Yours faithfully,

VETERAN (19/12).

Irish Company Apprentices

SIR,—I thank "Country Pharmacist" (C. & D., December 9, p. 834) for his reply to my letter on company appren-I, too, have some knowledge of country towns. was apprenticed in one, and, after qualifying, owned a country pharmacy for some years, and I know that in most country tewns prescriptions are like angels' visits few and far between. Has it not always been the grievance of country pharmacists that the local doctors do all their own compounding? Where, then, are the prescriptions to come from? "Country Pharmacist's" reference to the various lines sold by city company shops is quite irrelevant. Indeed, if his objection is to hold good, why not object, on the same grounds, to the sale of patent medicines and in the same arounds. medicines, sundries, etc. In fact, why not exclude the sale even of seidlitz powders while we are on the subject, for, to follow "Country Pharmacist's" own arguments, the time spent in selling these articles also "draws the attention of the pharmacist from his pharmaceutical duties to his pupil." And who is to take the gentle novice by the hand and lead him through the pharmaceutical labyrinth while his master is engaged in demonstrating the superiority of Murphy's pills over any other proprietary pills, etc.? "Country Pharmacist," I am afraid, has not much of a case if this is the best evidence he can bring forward to support it. At all events, we are forced back to the fact that the average company apprentice sees more pharmaceutical work than the average country apprentice, and as this is the case, it is a glaring injustice to exclude him from the Licence examination. As to the remarks of another correspondent in a previous issue, the conditions of company shops in Ireland are quite different from those prevailing in England, so that a comparison between the two, for our present purpose, is quite irrelevant.

Yours truly,

L.P.S.I. (14/12).

Irish Ph.C.'s and R.D.'s.

SIR,—The General Medical Council controls the regulations which govern the entrance to medicine and dentistry and the Royal Veterinary College has similar regulations. When the Pharmacentical Society was instituted similar courses of study were prescribed for intending pharmacists. In pharmacists and licentiates of the Apothecaries' Hall alone were vested the rights of legally compounding medical prescriptions. And here it must be admitted that the prescription of a physician, veterinary surgeon or dentist in a preficed constitution of the prescription of the prescription of a physician of the prescriptions. is a medical one, since each practitioner functions in a branch of medicine, the training to write such a prescription being almost identical in each profession. Laver the Pharmaceutical Society introduced regulations for the qualification of druggists to mix and retail poisons. The druggists may hold that since a knowledge of the British Pharmacopæia is compulsory for their examination, they can compound most or all of the galenicals in it. But it is quite one thing for a druggist to make a Winchester of lin. saponis, and quite another to make a few pounds of liq. mag. bicarb. Mechanically the R.D. could follow the B.P. directions like a parrot in making the latter, but could be explain the chemical reactions? Such knowledge is not superfluous; it is due to the public at large that the compounder, keeping open shop, is not a mere mechanical mixer of medicines, but one trained and qualified by examination to compound the most complex prescriptions in a scientific manner. is the dividing line between the business of a chemist and druggist as distinct from the profession of pharmacy. Manifestly when a physician, veterinary surgeon or dentist issued a prescription it was never intended as legal to have it compounded by, say, a grocer; but a. grocer—or, for that matter, any other trader—has as much legal and moral right to compound as a druggist. When any professional man prescribes it is only logical to believe that the prescription should be dispensed by a man with at least an equal training in pharmacy, materia medica, botany and chemistry. Druggists, as materia medica, botany and chemistry. Druggists, as such, have no standing on this count. Drug-store proprietors in England are agitating for recognition as vendors of poison pure and simple. Now, assuming that such authority were given them by law, would they be entitled to compound? Their position would be identical with the Date of the position would be identical. with Irish R.D.s at the moment. The R.D.s who sat in council, and expounded so much "hot air" at their "All Ireland" meeting, have threatened to secode from the Pharmaceutical Society of Ireland if they are not converted into L.P.S.I.s—the metamorphosis to take place by way of a modified examination. The latter reads all right, but when it is further reduced to "compounding" the boot pinches licentiates like myself who climbed the pharmaceutical ladder, beginning by passing the R.D. and later the Licence examination at no little cost and no little time. By all means abolish the druggist title, if the majority of druggists desire it; no doubt Northern R.D.s, being firm believers in majority rule, will agree. But for the Licence diploma they must pass in every subject on the present curriculum; I would suggest 30 per cent. for each subject instead of 50 per cent., which obtains at present, for candidates who have paid stiff fees and "swatted" long and weary hours. But, after all, I suppose they do not count, being only a minority. If this modified examination should not satisfy the druggists, then perhaps they could do worse than apply to the Northern Parliament for recognition as pharmaceutical chemists. Mr. Smyth suggested this alternative. Mr. Unsworth informed the meeting it was "a very rare prescription they got in the country." Then why these banterings for a title which will bring no financial gain banterings for a title willow will bring no maintain gain to the druggists. The Chemists' and Druggists' Society of Ireland has a membership of very keen business men. The Ph.C. diploma in exchange for the R.D. would mean more £ s. d. in the shape of prescriptions to the former R.D. In these days one gets nothing for nothing—not even a diploma; but if such were a reality the L.P.S.I. certificate would be hopelessly out of place in the atmosphere of tip caps kitchen lamps brooms and the atmosphere of tin cans, kitchen lamps, brooms and gas mantles.—Yours truly. GEORGE C. HENSON. Ballina.

Legal Queries

L. D. P. (18/12) holds his premises on a yearly tenancy, terminable by six months' notice on September 29. His landlord has just died; does this terminate the tenancy? If so, what steps must "L. D. P." take to secure a renewal of his tenancy? [The death of the landlord does not affect "L. D. P.'s" position at all, and he can continue to occupy the premises until his tenancy has been terminated by the deceased landlord's representatives or the new owner of the property, if it is sold.]

J. O. (5/12) owns, jointly with his neighbour, a pair of iron gates. His neighbour has let a room in his house to Girl Guides, who have broken one of the gates by swinging on it. "J. O." has suggested to his neighbour that they should share the expense of repairing the gate, but can get no reply. What should "J. O." do? [In the absence of an agreement "J. O." cannot compel his neighbour to contribute to the cost of repairing the gate. An action for damages for trespass may, however, lie against the Girl Guides or their parents.]

B. (16/12) holds business premises under a lease, which will expire shortly. About five years ago the landlord verbally promised "B." a renewal of the lease, upon the strength of which "B." refrained from purchasing other suitable premises in the neighbourhood. The landlord now refuses to grant a renewal of the lease, and calls upon "B." to vacate the premises at the end of the term. Can "B." insist upon a renewal of his lease, or, alternatively, claim damages in respect of the opportunity which he missed in consequence of his landlord's promise? [In our opinion, "B." has no remedy against his landlord, as the agreement for the renewal of the lease was not in writing. For this reason we do not consider that "B." could either compel his landlord to extend the lease or sustain an action for damages against his landlord based upon the latter's verbal promise.]

Jaygee (11/12) has, since before the war, been tenant of a combined shop and dwelling-house at a monthly rent of £! 10s. There is no formal agreement. Is he at liberty to sub-let the premises or assign the business? Is the landlord in a position to evict "Jaygee," and, if so, what notice must be given? (If there is no agreement to the contrary, "Jaygee" may sub-let the premises, within the limits of his own tenancy, and, in any case, he is entitled to sell the business as such. If the Court, having regard to the circumstances, regards the tenancy as a yearly one, it can be terminated only by six months' notice, expiring upon an anniversary of its commencement; if, on the other hand, the tenancy is a monthly one, a month's notice would suffice. If "Jaygee" resides on the premises he is probably entitled to the protection from eviction afforded by the Increase of Rent Act, 1920. That Act expires on June 24 next, but it may be extended.]

Miscellaneous Inquiries

When samp'es are sent particulars should be supplied to us as to their crigin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

J. M. (14/12).—The wages for a dispenser with Apothecaries' Hall qualification varies from 48s. to 72s. per week. It is difficult to say what should be the wages for improvers without knowing the extent of their experience. It should vary, for counter work chiefly, from 30s. to 36s.

1. C. C. (8/12).—Making Dilute Acids.—The amount of concentrated phosphoric acid required to form one pint of dilute acid is not an even figure, but it works out at 3 fl. ozs. of concentrated acid made up to 28 fl. ozs. with aq. dest. Dilute sulphuric acid is made up to a stated specific gravity. Actual experiment showed the following result: Aq. des. 32 fl. ozs., add slowly to it 2 fl. ozs. 190 minims of strong sulphuric acid. This worked out at the correct specific gravity, but it does not follow that it will always do so.

Subscribers' Symposium

For interchange of opinion among "C. & D." readers and brief notes on business and practical topics, especially rew ideas

Income Tax Allowance.

I wish to thank you for the reply to my question, published in the C. & D., December 9, p. 836. Your opinion coincided with my own, and your advice was followed but the Inspector of Taxes could not accept this fair view of the point raised, and declined to allow the rebate. I presume his decision is final? As the question and answer would probably be interesting to many others, I thought that the decision would also be.—Agricola~(9/12.)

Appreciations.

I need not tell you that I find the $\it C.$ & $\it D.$ exceedingly useful. (139/9.)

One can't do without the C. d D., as there is no other paper to equal it for "pill pushers." (97/4)

I have been without the C. & D. for a short time, but what a blank it was without it!—C. W. H. (180/18.)

It affords me great pleasure to renew my "sub." to your journal; without it my "bus." is comparable to a wheel without a hub—that is, I fear it would stand still.—A. W. T. (173/3.)

Congratulations on the way the C. & D. continues to improve. There's nothing like it, especially the Retail Price List, which is a splendid achievement. Best wishes for continued success.—R. C. (179/3.)

I think your estimate of a saving of 50 per cent, of the labour of stock-taking by means of your new Stock-taking Sheets is too modest. Not only is the work of writing down the quantities simplified, but pricing the articles in alphabetical order by means of the C, d D. Retail Price List will be child's play compared with the labour of turning up prices in wholesale drug-lists when the stock-taking is not arranged in order of the alphabet, as they will be in your system. J. C. (17/12.)

I beg to enclose my subscription for year 1923, which I do with the greatest of pleasure, as I find the C. & D. and its "offspring" of very great service to me during the year. Your Retail Price List has been a great boon to me during the past twelve months, and especially at stocktaking. I find it useful, too, in the little arguments over prices which very frequently occur with customers—I produce your list and point out, "There is the latest London price"; that settles it! I wish the staff of the C. & D. a very happy Christmas, and The Clemist and Druggist, and all connected with it, a bright and prosperous year in 1923, and, like King George V., may long reign over us.—W. M. K. (179/33.)

Retrospect of Fifty Years Ago

Reprinted from "The Chemist and Druggist," December 14, 1872

Seasonable Talk

Christmas is close upon us again, and, notwithstanding all its cares and all its crimes, the great Anglo-Saxon world prepares to make merry. And what a preparation that is! not to speak of the merry-making itself. The Christmas dinner is a feast which demands nobody knows how much forethought, and which extends its shadow over several weeks previously, and sometimes also into several weeks previously, and sometimes also into several weeks previously, and sometimes also into several weeks previously. But the Christmas party, the Christmas greetings, the Christmas presents, all these outlets to our superabundant flow of human nature, which reaches flood-tide at this season, all these must be prepared for, too. There are the little children; and there are always some new ones every Christmas; they must have a merry time of it; it is a Christian duty to make them love this season. The day may be tinged by sorrowful memories for some of the elder ones, but the gloom must be forgotten, or at least veiled, for the sake of the little ones. And that is only one of the Christmas duties. Flinty-hearted, discontented, avaricious, sordid, mean, sour, cynical, and disagreeable generally, we will not be so on December 25th: nor if an Act of Parliament can prevent it, on December 26th either. Old Serooge is dead now, as dead as Marley was before him; Dickens killed him.

We take this opportunity of wishing our friends in the trade a Merry Christmastide and a full measure of health, happiness and prosperity throughout the coming year

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Gelatine-coated Oval Pills.

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GOLD MEDALS;
Paris, 1889 and 1900.
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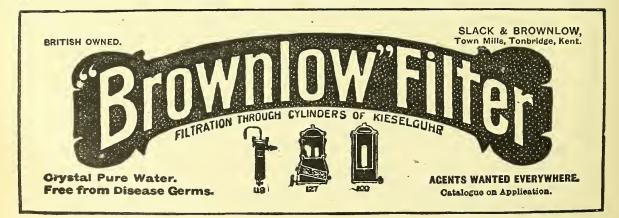
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Supreme Quality-Reasonable Price STICKS OF ALL USUAL SIZES.



In order to maintain the highest standard of Purity, samples of this Juice are periodically submitted to Mr. Ernest J. Parry, B.Sc., F.I.C., R.C.S., London, for analysis. Buyers may submit samples for analysis of any shipment they may receive at makers' expense.



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	25's	100's	1000			25's	106's	1000
Ammoniated Quinine, I dr		16/6	10/6	Quinine, gr. I		4/9	13/-	8/-
Aspirin, grs, 5	3/6	8/6	3/9	,, ,, 2		7/3	21/6	15/-
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	- 3/-	7/6	3/3	Soda Mints -		2/6	4/-	-/10
Calomel, gr. I	3/3	5/9	1/9	Thyroid, grs. 2		4/6	11/9	6/6
	4/6	11/9	6/6	Vegetable Laxative		4/6	11/9	6/6
Hyd. c. Creta, gr. I	2/6	5/3	2/6	***************************************				
	5/3	12/9	7/6	HOWARD LL	OYD	&	CO.,	Ltd.
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(An improved Santal Wood Preparation) SPECIALLY MANUFACTURED for ALL CLIMATIC CONDITIONS. Bottles or Poxes containing 36 Capsules 24/6 per doz. May be obtained through most Wholesalers and Export Agents.

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"RESPINES"

since their function is to alleviate and cure all the usual disorders of the respiratory organs by the absorption of p ne vapours.

It 'tey are as good as their name, tell your customers so, if not, tell us.

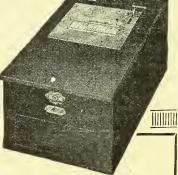
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As advertised, any dissatisfied customer will receive money back on applying direct—this saves you from trouble and ensures your recommendation and profit.

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IN IMPERIAL HALF-PINTS. 4/-

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The ever-growing demand for Snow-



SNOWFIRE

The ever-growing demand for Snowfire is largely due to users' recommendation. It is a boon for
chapped hands, cracked lips and rough skin, and
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the 1d. and 2d. tablets and does not affect the sale
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BISHOP'S SOLUBLE ASPIRIN IN TABLETS

Registered Name:

LITMOPYRINE

Each tablet contains 5 grains of Lithium Acetyl-Salicylate.

LITMOPYRINE TABLETS

In bottles of 40 at 22/6 per doz. subj. M.R., 2/6

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LITMOPYRINE is also supplied as a POWDER

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GRANULAR EFFERVESCENT
5 grains in 60 grains.

And in the following combinations:

LITMOPYRINE and CAFFEINE in TABLET FORM and GRANULAR EFFERVESCENT LITMOPYRINE, grains 5, with CAFFEINE ALKALOID, grain ½ in 60 grains.

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Generous Profits

are assured to the Pharmacist who stocks these popular products.

Kay's 'LINSEED COMPOUND'
Compound Essence of Linseed

Kay's MOUNTAIN FLAX PILLS

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Purchased in convenient quantities from any Wholesaler they carry a clear protected (P.A.T.A.) 25% on turnover (33½% on cost). Their real merit—backed byshrewd advertising — ensures a steady evergrowing sale.

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IRVONA is obtainable from all the usual wholesale houses, or direct, at the following prices—3/- size, 27/- per dozen.

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"IRVOLAX" (the safe aperient).

1/3 size 12/- per doz.

3/- ,, (four times the quantity) 27/- ,,

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3/- packet 29/- per doz.

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Beecham's Pills:

1s. 3d. size 10s. 6d. per doz. net. 3s. 0d. " 26s. 6d. 5s. 0d. new size, contains double 50s. 0d. the quantity of 3s. box,

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Minimum quantity £5 value.

Packages FREE. Carriage PAID. CASH WITH ORDER.

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Dr. Bengué's Ethyl Chloride for Local and General Anaesthesia in Glass and Metal tubes.

Large selection of tubes.

Anestile for Local Anaesthesia.

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Methyl Chloride.

Ask for Special Terms and Showcards for Dr. Bengué's Balsam.

Dr. BENGUÉ & CO., MANUFACTURING CHEMISTS, Selection of the Company of t

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A safe, simple, and reliable remedy for Children's Ailments is advertised so extensively in the daily and weekly Press as to bring mothers to the retailer without effort on his part.

retailer without effort on his part.
The selling has been done before the mother reaches the chemist, and, having supplied her, it is only common sense to claim she will buy other family necessaries from him. Moreover, the retailer has a profitable return on a quick turnover.

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Doctors are now daily finding that this new Iron preparation fully justifies all we claim for it, viz., that by reason of its large percentage of pure assimilable Iron Anæmic conditions rapidly respond, there is considerable improvement in even the worst cases within a week. It does not constipate; does not harm the teeth; does not cause gastric irritation. can safely recommend it. Retailed in one size only, 8-oz. bottles, price 5/-.

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Veterinary Antiphlogistine will be extensively advertised to Veterinary Surgeons, Trainers, Breeders, and to everyone interested in the treatment of inflammatory diseases in animals. The favourable reputation Antiphlogistine has won for itself ensures a favourable reception for Veterinary Antiphlogistine and the demand for it is assured.

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White, Yellow, Amber, & Ruby Red, for all Pharmaceutical and Veterinary purposes

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goes one better than ordinary ammonia in quality—and profit. Recommend it and reap that benefit.

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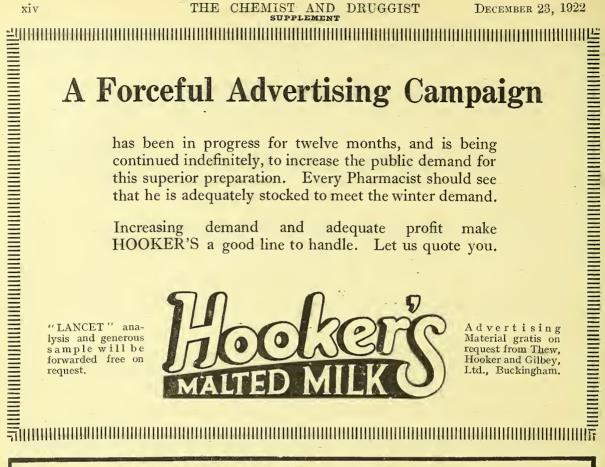
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THE PHARMACEUTICAL LANOLINE

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Introduced in 1910, the first

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VITAFER has outlived the great majority of its competitors, and by proved worth has maintained its position.

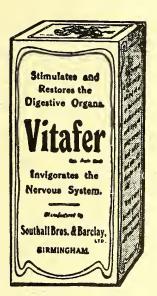
On the P.A.T.A. list, in tins,

1/6, 2/6, 4/6, and 7/6.

Sold at face value.

£5 orders with window show carry a bonus of 15/- selling price.

Advertising aids, window bills, samples, &c., freely supplied.



Vitafer shows a PROFIT of

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ESTABLISHED 1855.

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Liebig's Beef & Malt Wine

English Port Style

British and Foreign Wines of all varieties

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Specially low-cut prices for the Autumn 1922.

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NEW ZEALAND "IMPERIAL BEE."

THE FINEST QUALITY THAT BEES PRODUCE.

Cases 48×½'s Monopots .. 6/9 per doz.
carriage paid
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Quotations for bulk (cases 2/60 lb. tins) all grades,
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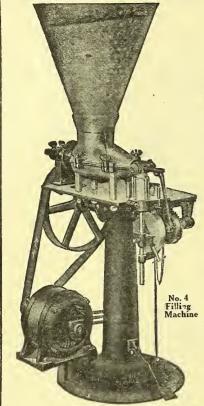
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10 oz. size	2/- per tin	18/6 per doz.		
20 "	4/- "	37/- "		
36 "	7/- "	64/8 "		

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THE CREAMERIES, WRENBURY, CHESHIRE

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FILLING AND CLOSING MACHINERY.

For many years the Arthur Colton Company have recognised the importance of efficient machinery for the packing of Tooth pastes, Ointments, Toilet Creams, &c., and they have as the results of careful research work produced a range of machines to handle the material at all stages.

We shall be pleased to have the opportunity of submitting full details of any or all of the following machines on request.

Tube Fillers. Paste Mixers. Tube Closers. Combination Fillers and Closers.

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"ATLAS" PATENT MIXERS & SIFTERS

Combined or Separate Machines,



UNEQUALLED FOR EFFICIENCY AND DURABILITY.

Various sizes for hand or power.

BALL MILLS GRINDERS DRYERS

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ATLAS WORKS, PRESTON. Established 1791.

SALVO PETROI

The Perfection of Petroleum Jelly MANUFACTURED SOLELY BY

THE DEE OIL COMPANY, Ltd. DELTA WORKS, BOOTLE, LIVERPOOL.

Packed in barrels, kegs and smaller packages according to requirements.

Other Grades PETROLEUM JELLIES, WHITE BASES, ETC.

Samples and prices on application.

"OLEUM DEELINÆ," a certain cure for Eczema.

Wires: "Cestrian Liverpool"



Heartiest Greetings

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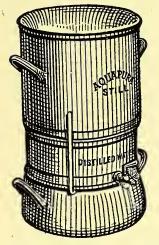
May the "Piper o' Perth" do his little bit in aiding you to the success you desire for 1923 is the sincere wish of

THOMAS HARLEY.

Manufacturing Chemist. PERTH, SCOTLAND

The "AQUAPURA" WATER STILL

WILL DISTIL ONE QUART PER HOUR



PRICE 52/6

The "Aquapura" Water Still is ideal for the pharmacy. Made in light blue porcelain-enamelled steel, this Still, apart from its great utility, has a high-class appearance.

Distilled water is essential in every pharmacy and the "Aquapura" Still will supply this at a cost that is almost negligible, as after the initial outlay the only cost is the gas.

Where there is no gas a Primus stove is used.

We shall be pleased to send further particulars and a photographic reproduction of the "Aquapura" Still on receipt of post card.

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Manesty Buildings, College Lane

LIVERPOOL

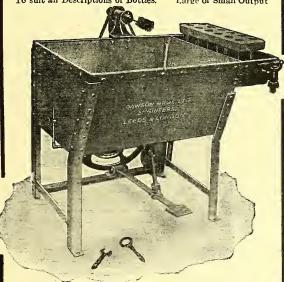
Telegrams: "Sanitas," Liverpool.

Established 1843.

Telephone: Royal 2060.



The World-Renowned Bottle-Washing Machine Makers.
To suit all Descriptions of Bottles. Large or Small Output



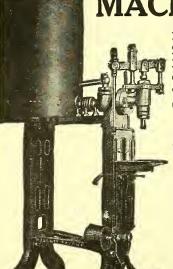
No. 21. Freadle Bottle-Washing Machine. Most Suitable for Manufacturing Chemists.

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Write for Complete Lists

ROBERTS' ORIGINAL PATENT

BOTTLE-FILLING



Don't waste money on imitations, buy Roberts' Machines which actually Created the Records for

CLEANLINESS SIMPLICITY

and Rapidity in Bottle Filling.

NOTE the Address:
ROBERTS' PATENT
FILLING MACHINE CO.
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Our latest patent
"Alpha," price £14,
will fill 10 gross bottles
per hour.

Write for Particulars.
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Fig. 957	The "EMP	IRE"			
		BOTTLES			
Place your order now for present or future delivery, as prices will not go any lower than the following. Chemists who have built up a reputation for reliable Hot Water Bottles continue to order our well-known "EMPIRE" brand of these goods. Do not risk trying an unknown make.					
	One quality only—the Best. Guaranteed for The Red Hot Water Bottles are selling well. To anyone looking for a seasonable present. Each a spare washer.	The colour and finish appeal			
Heavy make Sizes	PRICES as follows:— 6×8 6×10 6-12 8×10 8×12	8×14 10×12 10×14 in.			
Grey rubber each	3/5 3/9 4/1 4/5 4/9 3/8 4/0 4/4 4/8 5/0	5/3 5/6 5/9 6/6 =			
Red lubber ,,	Each Bottle in a strong paper bag with directions for use.				
Sizes Scarlet or grey plush ea.	6×8	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
Velour, assorted colours					
(washable) each 1/3 1/5 1/7 1/9 1/10 2/- 2/3 2/6 MUFF WARMER red rubber, oval shape, 3\{\frac{1}{2}\times 7\times 7\times 1\times 2\rightarrow 2\rig					
For the Christmas trade we hold a large variety of Toilet Sundries —BRUSHES. COMBS, MANICURE INSTRUMENTS. POWDER PUEFS, SCISSORS, VANITY BOXES, ETC., ETC.					
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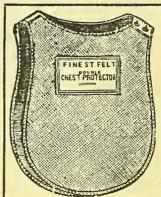
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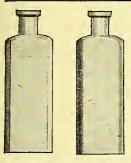
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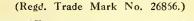
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THE CHEMIST AND DRUGGIST

42 CANNON ST. LONDON E.C. 4

DECEMBER 23, 1922

This Supplement is inserted in every copy of The Chemist & Druggist.

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1.—LIVERPOOL STREET STATION (NEAR).—Retail and Dispensing Business, with small export trade; returns exceed £5,000 per annum; gross profit over 50 per cent.; well-fitted shop, heavily stocked; held on lease; price £5,500, or near offer. 2.—WESTERN SUBURB.—Cash Retail Business; situate in busy main thoroughfare; attractive shop, double-fronted; excellent residence; 21 years' lease; returns between £1,800 and £2,000 yearly; present rate less owing to death; prompt sale desired.

£2,000 yearly; present rate less owing to death; prompt sale desired.

3.—SHOREDITCH (NEAR).—Cash Retail Business, in busy shopping centre; returns, under management, £50 weekly; net profit, 25 per cent.; double-fronted shop, attractive windows; held on lease at moderate rental, sub-let £45; price about £1,500, or valuation terms entertained.

4.—LONDON (WEST-END).—Good-class Retail and Dispensing Business; returns about £10,000 per annum; gross profit, 50 per cent.; double-fronted shop, well fitted in mahogany, and heavily stocked; new lease will be granted; price to be arranged equitably.

5.—WANDSWORTH.—Cash Drug Stores; returns, present rate, £15 to £16 weekly, under management, at good prices; single-fronted shop, well stocked; small living accommodation; held on long lease; rent £48; price £525 cash, or near offer.

6.—GREAT WESTERN LINE (Few Miles Out).—General Retail and Dispensing Business; returns about £30 weekly, with scope for large increase in the hands of an energetic man; held on lease; valuation terms entertained.

7.—KENT COAST.—General Retail Business, very much neglected; in the hands of an energetic man the turnover could undoubtedly be increased; present rate £10 weekly; lock-up shop; held on lease at rental of £20 per year; price to be arranged.

arranged.

8.—SOUTH COAST.—General Retail and Dispensing Business; esition unique; returns exceed £2,000 per annum, with scope or extension; double-fronted shop; large residence; held on

8.—SOUTH COAST.—General Retail and Dispensing Business; position unique; returns exceed £2,000 per annum, with scope for extension; double-fronted shop; large residence; held on lease; price £2,000.

9.—DORSET.—General Retail and Dispensing Business, with Optics; returns last year £2,530; net profit, about 25 per cent.; the shop is well fitted and stocked; there is ample living accommodation; terms, goodwill £250, stock and fixtures at valuation; freehold, £2,000; part payment entertained.

10.—NEWCASTLE-ON-TYNE (Within Easy Distance of).—General Retail Business, offering scope for extending trading under energetic management; returns about £20 weekly; single-fronted shop, fitted in mahogany, and fully stocked; rent moderate; terms, valuation of stock and fixtures, about £650.

11.—NORTHANTS (MARKET TOWN).—Good middle-class Family Retail and Photographic trade; very old-established business; returns between £3,000 and £3,500; modern fitted shop, double fronted; capital position; terms, lease and goodwill, £250; stock and fixtures at valuation.

12.—SOUTH WALES.—Old-established Business, with Wine and Spirit Licence; returns last year, £3,220, at good prices; house contains 10 large rooms; private entrance; 17 years' lease; no opposition; price to be arranged.

opposition; price to be arranged.

opposition; price to be arranged.

13.—YORKS.—General Retail and Prescribing Business; returns last year about £800, with scope for increase; single-fronted shop, fitted in mahogany and fully stocked; new lease will be granted; rent £33; price £730.

14.—WHOLESALE BUSINESS.—Established upwards of a century; a number of Proprietaries are included, which are stocked by most Chemists in the kingdom; returns have been over £6,000, now less; further details on application.

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Messrs. O. & Co. desire to emphasize the necessity of a periodical Statement of Account by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted and eventually becomes the cause of confusion and loss.

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BUSINESSES FOR DISPOSAL.

DURHAM COUNTY.—Splendidly fitted small Country Pharmacy; turnover over £1,000, with N.H.I.; rent 12s. 6d. weekly clear; stock and fixtures at valuation and goodwill; excellent reason for disposal. "Rex," 17/528, Office of this Paper.

NORTH-WEST Seaside Resort.—Chemist's Cash Business; over £4,000, including Wholesale and Retail Photographic and Optical; optical big pussibilities (having been neglected), photographic all latest machinery for D. & P. and enlarging; 4-storey premises; owned by seller; persons with £2,500 to £3,000 will obtain further particulars on banker's reference; no agents; good reasons for selling. 17/532, Office of this Paper.

SOUTH WALES.—Chemist, anxious to retire in the early spring, wishes to sell his Business; genuine A1 business; own property; will lease premises; fullest particulars given to a genuine buyer; banker's references required; capital can partly remain on security. Apply 17/529, Office of this Paper.

CLEAN, light Retail Business for disposal; double-fronted shop in main shopping thoroughfare of large Lancashire indus-trial town; not on Panel; unlimited scope; all clean, saleable stock. Reply 185/37, Office of this Paper.

NUCLEUS of Pharmacy for immediate disposal; lock-up shop; recently opened; turnover £7.£8 weekly; N.H.I. 60 per month and increasing; lease 2 years at £65 per annum inclusive, or purchase system at £45 per annum; a sacrifice; £100 all at. "M.P.S.," 384b Rotherhithe New Road, S.E.16.

AGENCIES,

A BRITISH firm desires to represent English makers of Medicinal Throat Lozenges, Pastilles and Confections, and Compressed Tablets in bulk; visiting all the principal Chemists in Canada. One English maker enjoys a large volume of business, while an American firm disposes of over 50 tons annually of throat pastilles. Apply Anglo-American Agencies, Ltd., 41/43 St. Francois-Xavier Street, Montreal, Canada.

A GENT for Manchester and district wanted by old-established and well-known manufacturers of Druggists' Glassware and Sundries. Good commission. Applicants must reside in district and have good previous experience and wide hospital and wholesale connection. Apply by letter to "Sundries," c/o Deacons, Leadenhall Street, E.C.3.

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A GENTS wanted everywhere for French Dental Pharmaceutical Manufacturers to call on Dentists; liberal terms;
keenly competitive prices owing to rate of exchange; all dentists
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Paper.

Paper.

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1.—WEST OF ENGLAND.—Light Country Retail, with Kodak Agency, in small growing town. Returns, £1,750, scope for extension; very low rent; long lease. Modern fitted Pharmacy, fully stocked. Price £1,500.

2.—EAST MIDLANDS.—For early disposal, a sound, good-class Retail Business; returns approach £3,500; books properly kept and audited; fine position in important town; valuation of stock and fixtures, plus a small goodwill, in all about £2,500; strongly recommended.

3.—SOUTH WALES.—Brisk Cash Retail, with Kodak Agency, in large market town. Returns approach £2,500. Smart, modern Pharmacy, fully stocked. Price £500, and valuation, in all about £1,600.

Pharmacy, fully stocked. Price £500, and valuation, in all about £1,600.

4.—PORTSMOUTH (Death Vacancy).—Old-established Business, in unique position, same hands many years, no side lines, splendid chance for energetic man. Lock-np shop, long lease.

Price £750, or offer; part can remain.

5.—LONDON (WESTERN SUBURB).—Light cash Retail, with excellent Photographic trade; in main road position; returns, about £3,000; lock-up shop; low rent; on lease. Price about £2,000; £1,200 cash, balance by instalments.

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Messrs, BERDOE & FISH are now booking dates for the New Year, and are in a position to fix up one or two large stocktakings during the next two months at special low rates; our long and varied experience enables us to do the work quickly and without disturbing the general routine of business. We cordially invite applications for our special revised terms,

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4.—LONDON, S.W.—Chemist's and Druggist's; lease 20 years to run, at £60; let off £35 per annum; returns, £50; all at, £1,000; good living rooms and splendid opportunity for qualified man.

5.—MIDLAND MARKET TOWN.—Chemist's and Druggist's.

qualified man.

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6.—CHELTENHAM.—Small Tablet-making Business for disposal. Price, all at, for quick sale, £350.

WANTED, immediately, progressive Business on South Coast for client with £1,500 cash; must bear strictest investigation.

WANTED immediately, for client with £1,000 Partnership in progressive Business, or genuine Business which is for disposal; must bear strictest investigation.

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BUSINESS, South, taking about £30 weekly with stope for increase, Managership, with view to purchase within 12 months entertained; Kodak Agency or opening for same. Please supply full details, in confidence, to 186/170, Office of this Paper.

WANTED to purchase an established Proprietary Article or Business with good sale for own Specialities in London or West of England; can invest about £1,500 or £2,000. Write 186/11, Office of this Paper.

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an Advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remiserations are the supplements to the supplement of the supplement of the supplement. tances can be sent to us direct or through the advertisers' correspondents in this country.

SITUATIONS OPEN.

[HOME.]

RETAIL,

6s. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

GRAVESEND.—Wanted, after Christmas, an Assistant, about 25, for a good medium-class business; must be a competent and accurate Dispenser, of gentlemanly appearance and address. Please send full replies in first instance as to salary required, experience, and last two references. E. Millhonse, New Road, Gravesend.

L ONDON, S.E.—Qualified Assistant, aged about 30; N.H.I. and counter, capable of managing business; outdoors. State whether married, salary required, and other particulars. J. W. Green, 60 Nunhcad Lane, S.E.

LONDON, S.W.-Junior Assistant (male) required for bestclass Pharmacy; outdoors; Stock and Dispensing. Full particulars of experience, age and salary desired, by letter only, to Mr. Bourdas, 6 Pont Street, S.W.1.

JUNIOR wanted, outdoors, nnqualified, in good-class suburban business; knowledge Photography essential; good references. "S.," 186/2, Office of this Paper.

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m R}^{
m EQUIRED}$, Manager for branch business (qualified) with \$2500 capital; co-partnership scheme; salary and share of profits. 186/5, Office of this Paper.

UNQUALIFIED Assistant wanted as Connterman; must have had first-class experience, and be conversant with the requirements of mcdical men; short hours; outdoors; other Assistants kept. Apply, with usual particulars, to Ralph Cuthbert, Ltd., Westgate, Huddersfield.

WANTED, immediately, Manager for good middle-class Retail and Dispensing business; salary £7 weekly and commission. This is a good opening for a sound, energetic man. Apply "Alpha," c/o Orridge & Co., 56 Lndgate Hill, E.C.4.

WANTED, Yorkshire, West Riding, qualified Lady Assistant, young, used to Counter work. Apply, stating age, salary, etc., to 185/33, Office of this Paper.

... WHOLESALE.

TRELAND.—Representatives required for high-class Medical and Pharmaceutical preparations; only those with connection and first-class references need apply. Also Representative for English provinces. Fullest particulars to 17/527, Office of this Paper.

MANCHESTER Druggists' Sundries House requires Travellers with live connection (essential) amongst Retail Chemists in Lancashire, Yorkshire, Midlands, North and South Wales and Scotland to carry Sundries at competitive prices; salary, commission and expenses given; ample scope and every encouragement for capable men; no others need apply. 186/4, Office of this Paper.

A DVERTISER, about to introduce proprietary article, requires competent Manager; must be a good organiser, with sound business experience and knowledge trade; advertising experience desirable; moderate salary with prospects. Write, giving particulars, career to date, and indicating salary required, P.C.B. 85/23, Office of this Paper.

ENERGETIC Representative wanted in Yorkshire, also Durham and Northumberland, for sale of Table Glass, Lighting Glassware and Bottles, mainly on commission basis; experience of the trade not imporative. Application, with full particulars, to "Z. A." 407, c/o Deacons, Leadenhall Street, E.C.3.

PIRST-CLASS Representative wanted with good connection wholesale and/or retail chemists for Malt Extract and Malt Extract with Cod Liver Oil, for ground north of line London, Worcester, and Aberystwytb. Liberal commission, Reply, 174/13, Office of this Paper.

REPRESENTATIVE required for sale of complete range of Toilet Preparations of an old-established firm; exceptional prospects for a really live man with a good record, to whom every assistance will be given. Application, which will be treated in strictest confidence, in the first instance to 17/526, Office of this Paper.

DEPRESENTATIVES required by manufacturers of Toilet Preparations for (1) Lancashire, Yorkshire and North of England; (2) Midland Counties and North Wales; (3) South England and South Wales; and (4) London and snburbs; applicants must have specialised in the selling of branded and advertised lines, and have a good, live connection amongst Ladies' Hairdressers, Chemists and Stores; part expenses and commission will be paid, and preference given to applicants representing another good house. 17/530, Office of this Paper.

TRAVELLER for South London wanted by old-established and well-known manufacturers of Druggists' Glassware and Sundries. Good commission. Applicants must have good previous experience and wide hospital and wholesale connection. Apply by letter to "Sundries," care Deacons, Leadenhall Street, L.C.3.

TRAVELLER wanted to represent Drug House for Lancashire, preferably resident in Manchester. Full particulars, 185/16, Office of this Paper.

WANTED, Representative for Lancashire and Yorkshire for progressive firm; branded Packed Goods, attractively packed, good show material, and Mcdicated Socks; big profit to chemists; goods shown at Leeds and Manchester Exhibitions; good prospects for live salesman with record; others need not apply. 181/31, Office of this Paper.

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WANTED, by London patent medicine house, first-class Stockkeeper for "Heavies"; applicants must have held similar position; no amateurs considered. Apply to P.C.B. 85/24, Office of this Paper.

SITUATIONS WANTED.

[HOME.]

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2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

A. A. Assistant or Manager, qualified, young, tall, quick, accurate Dispenser, good all-round experience Photography, Window-dressing, desires change; disengaged January; London or provinces; excellent references. 186/6, Office of this Paper.

A QUALIFIED (Hall) experienced woman wants post, Dispenser, General Assistant; very moderate salary. "Dispenser," 108 Lower Richmond Road, Putney, S.W.

A BSTAINER, qualified Manager; tall; reliable; varied experience Photography; 8 years last post. Parkinson, 13 Hartington Road, St. Margaret's, Twickenham.

A S Improver, young lady; capable Dispenser; one subject complete Hall, Counter Work; disengaged. Apply, Hordle, 41 Augustine Street, Taunton.

A SSISTANT in high-class Pharmacy; 32; married; educated Public School; willing to take any post. M.L. 1566, Office of this Paper.

A SSISTANT or Dispenser, 22, two years' war service, served regular apprenticeship, desires any post for which qualifications are suitable. M.L. 66813, Office of this Paper.

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A SSISTANT; unqualified; 38; 5 ft. 11 in.; single; Dispensing, Counter, Window-dressing and Optics, and particularly Surgical Hosiery and Trusses; excellent references; near Birmingham or Worcester district preferred, but not essential; capable of taking charge, or senior; state salary and hours. "Rhei," 35 Hampden Road, Wrexham.

A SSISTANT or Branch Manager, 25; well experienced in Dispensing and Counter Work. To commence on or after January 2. J. M. Gregory, 30 Havelock Street, Canterbury.

A SSISTANT; unqualified; 27; 6½ years' good experience; Birmingham or Midlands preferred. "G. B.," 14 Sebright Avenue, London Road, Worcester.

CHEMIST, qualified (Major), having disposed of business, sceks engagement as Manager, resident preferred, permanency, in London district; excellent references; middle aged. "J.," c/o Tupholme's, Earl's Court, London, S.W.

CHEMIST'S Assistant; Retail or Wholesale; 25; 3 years' war service; thorough knowledge of all branches; will take any post. M.L. 15227, Office of this Paper.

COMPETENT Assistant; unqualified; tall; 38; gentlemanly; Counter, Dispensing, Window-dresser, Photo. etc.; permanency; London only. "Statim," 23 Doughty Street, Holborn, W.C

DISPENSER or Hospital Attendant to Medical Officer; 42; in charge of stores, R.N. hospital; holds Nursing Certificate; X-ray Operator. M.L. 4598/22, Office of this Paper.

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